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Stela representing Amenophis III and Taya
from Tell el-'Amarnah.

Scale 1/2.

STELA IN HONOUR OF AMENOPHIS III AND TAYA, FROM TELL EL-'AMARNAH

By F. LL. GRIFFITH

With Plate I.

Our work amongst the houses of Tell el-'Amarnah in the beginning of 1924 brought to light several shrine-shaped or round-topped stelae (some of them very small and rude), showing a king and queen, or king alone, seated before a stand with food etc. under the rays of Aten. They are evidently relics of the loyalty and worship accorded by the people to the divine king and his family¹, the king himself being subject only to the supreme Aten. The finest of the stelae (found in a very large and important house) is shown on the accompanying plate made from one of Mr. Chaundy's admirable photographs; instead of the reigning king we here have the royal parents in a similar scene. The fragments were put together by Mr. Young at the Ashmolean Museum and the stela is now in the British Museum. The description of it is as follows:

540. Shrine-shaped stela of limestone sculptured and painted, height 30 cm., width of "roof" 30 cm.

At the top is a row of uraei wearing disks with traces of blue and red paint, above a cavetto cornice, blue, red and ? . Below this are traces of colour on the architrave and from it hang numerous bunches of grapes, apparently blue on a red ground. The jambs are decorated with bouquets of lotus flowers and buds with a leaf at the top which on the right jamb leaves the grapes visible while on the left it conceals them. Inside the shrine at the top is seen the blue sky, below which is the sun's disk with uraeus and *ankh*, and short radiating arms, one of the hands extending "life" to Amenophis III and another to Queen Taya seated by his side; a small stand of offerings is on the right and a large one with meat, censers, garlands, papyrus and ears of corn before the king on the left.

The representation of the king is noteworthy; the thick neck distinguishes him at once from Akhenaten though the figure is treated in the usual Akhenaten style. He sits in a rather weary and decrepit attitude with the head thrown forward, the right hand over his knee. He wears a *khepersh*-cap, coloured black instead of the usual blue, blue necklace-bands on his neck and chest, a fringed garment down to the ankles, sandals on his feet. The colouring is both unconventional and inappropriate though pleasing. Red may represent the flesh seen beneath the garment but the bare flesh seems generally to have been left pale or white for the sake of contrast.

Unhappily the head and body of the queen are almost destroyed. Her hair is preserved on a fragment of uncertain position and her head-dress was of a shape now difficult to recognize; another uncertain fragment coloured blue and red may belong to her arm. The profile of her face to the top of the nose is preserved at the king's shoulder. The hand laid

¹ Compare the beautiful triptych-stela of the royal family published with others of the same character in BORCHARDT, *Porträts der Königin Nefret-ete*, Pl. I. It served as an altar-piece, *op. cit.*, 20-24.

across her lap probably also belongs to the queen rather than the king. Her garment appears to reach nearly to the ankle but it is doubtful if it has been fringed. Both king and queen have streamers flowing from the head-dress and the waist-band, and their feet rest on red cushions upon a blue mat. There appears to be a low stool at the side of the throne supporting garlands or collars.

The inscriptions give the name and titles of the Aten, the cartouches of the Aten in their later form, two cartouches of Amenophis III (repeating however the prenomen in order to avoid the now unorthodox name Amenhotp) and the cartouche of Taya.

The edges of the stela were painted in bands (not now traceable since it was cleaned), and the cornice of uraei etc. is carried along the sides.

This stela is from R. 44. 2, the house of Pnehesi. It is in several fragments and important pieces are missing. Most of the pieces were found at the east and west ends of the north loggia, about 10 cm. above the floor, but one large fragment was in the west loggia. Much of the colour, especially the powdery blue paint, fell away with the dirt and dust encrusted upon it.

The form of the Aten names on this stela shows that it was made not earlier than the second half of the reign of Akhenaten, many years after the death of his father. Amenophis III is shown as an aged man and fat; an example of such a portrait, but without the name, was found at Tell el-'Amarnah in the workshop of the chief sculptor Dhontmose¹. The replacement of the Amenite nomen by a repetition of the prenomen is found also in a graffito at Aşwân².

¹ BORCHARDT, *Mitteilungen*, no. 57, p. 14. Compare BORCHARDT, *Porträtkopf der Königin Teje*, fig. 12 and the stela dedicated by Taya to her deceased husband, *ibid.*, fig. 26, both from Ghurâb.

² MARIETTE, *Monuments*, Pl. 26 u; DE MORGAN, *Catalogue* 1, no. 174.

THE EXCAVATIONS AT EL-'AMARNAH, SEASON 1924-5

By T. WHITTEMORE

With Plates II to VIII.

The shadow of Mr. Newton's death lies heavily upon the work of the Egypt Exploration Society at El-'Amarnah this year. Mr. Newton reached Cairo, accompanied by Mr. Duncan Greenlees and Mr. H. B. Clark, who had travelled out from England with him, on the first day of November, and three days later went up the river with them. I joined them at El-'Amarnah on the seventh of December. Obviously Mr. Newton was not quite in his usual health, but no one attached grave importance to what appeared to be but a slight indisposition.

The North Palace, which had been but partly excavated in the winter of 1923-4, was to be the main object of inquiry this season. Since the services of the entire staff were needed on the site, it was proposed that the large ancient house close at hand, which last year had been partially retrieved to make a lodging for the excavators near the work, should be still further restored to accommodate the whole family—staff, servants and occasional guests. While this work of renovation was proceeding the old staff house at El-Hâg Kāndil was occupied, and a small group, comprising the trained workmen from Kuft, annually in the service of the Society, and a few men and children from the neighbouring village, was put to work on town houses, a stop-gap always available at El-'Amarnah. About a week later this group was increased to full strength by numbers drawn equally from El-Hâg Kāndil and Et-Til, and the undertaking of the season was fairly begun.

Events of one sort and another, however, together with delays in completing the north house, prevented abandonment of the southern quarters until early December. One of the staff was in constant oversight of the work, and Mr. Newton himself came up a distance of three miles for a part of each day. At last, in the first week of December, we were all living together in our new home at the north. What seemed to be an attack of influenza sent Mr. Newton to bed, but as days went on and he appeared no better, he was taken over the fields on a litter on the shoulders of our men, down the river to Mellawī in our own felucca, and so by train to the American Hospital in Asyût. Even at the hospital the doctors were, at first, mystified, but change rapid and alarming set in and it was soon evident that his illness was *Encephalitis lethargica*. On Christmas Day he died. All that could have been done in England was done for him there in Egypt. He was tenderly and intelligently cared for by the doctors and nurses at the hospital. His coffin, covered with roses, stood in the hospital chapel, where the burial service from the Book of Common Prayer was read. He was buried in the Anglo-American Cemetery at Asyût.

Such a calamity determined us to close the work at the earliest possible moment. Meanwhile Mr. Robert Mond, with his usual helpfulness, sent us Mr. Emery for a few days to work on inscriptions, and Mr. Lythgoe, Curator of the Department of Egyptian Anti-

quities in the New York Metropolitan Museum, generously lent us from his work at Thebes Mr. Wilkinson who, in the time at his command, traced some of the more important paintings in the palace.

The following statement is but a preliminary report on the work of the season of 1924-25 at El-'Amarnah.

THE NORTH PALACE.

The north half of the palace which was excavated and described by Mr. Newton last year must necessarily be included in the description of the completely excavated building.

A rectangular block about 112 metres by 142 metres of heavy exterior walls, two metres in width, built of sun-dried brick, encloses the main body of the palace (plan, Pl. II). Its chief axis is drawn approximately from west to east. The walls, in some places, stand to a height of more than two metres but nowhere high enough to reach windows. Timber bonds extend through them lengthwise. The bricks measure about $37 \times 17 \times 9$ cm. None of them bear the impression of stamps as in the palace of Amenophis III at Thebes. The roof has completely perished.

The small main entrance of the palace, facing the river and but a few hundred yards distant from it, gives access to a fore-court offering an impressive approach to foundations of a massive architectural feature. Corroborating sculptured scenes in the rock-tombs at Akhetaten tempt one to include in this a royal *loggia* or audience-window, a "window of the appearing" where the king graciously manifested himself to the chosen of his favour. From the left of the entrance court there opens an enclosed area. Situated in the centre of this is a small free-standing construction, triple in plan, of which only the rough cement foundations, precursor of concrete, remain. It resembles one of the units of building at Maru Aten¹. On the inner side of the enclosure remain the foundations of a portal facing the small central construction. On each side of the court opens a series of nine small, separated, rectangular rooms, identical in design, and a flight of stairs. In front of these rooms runs a path marked off by a low curb.

A fragment *in situ* of one of the door-jambs found, it will be recalled, last year, bears the name of Merytaten in palimpsest, which is met throughout the edifice. Together with a few thresholds this is all the stone facing that has survived in this section. Fragments of ring-bezels of Nefertete and Tut-ankhamūn were found this year. A more careful study of the walls has disclosed further traces of the conventional colour which have escaped peeling by the action of the palm trees whose roots have forced their way in all directions through the mud bricks.

On the right of the main entrance and corresponding to the area just described is an enclosed space of similar size, devoted originally almost entirely to buildings of more complicated design. The entrance opens upon a free, uncovered space, giving a certain solemnity of approach, as through a chancel to a sanctuary. On either side of the entrance, constructionally reinforced within, are six rectangular chambers opening toward other rectangular compartments, all facing the small uncovered intermediate space. They form ten small divisions in all and are surrounded by a single line of bases of mud brick piers a metre square and 28 in number, in orthostyle.

These confronting precincts seem to have been used for religious ceremonies connected with the sun-drama. The analogous arrangement of Egyptian temple-storerooms as well

¹ PERT, WOOLLEY, etc., *City of Akhetaten*, Pl. XXX, Maru-Aten II.



as of treasuries in Christian churches lends to these chambers the aspect of sacristies—rooms for the vesting and unvesting of the kings and priests, depositories of the vestments, sacred vessels and offerings used in the rites. Some of the rooms may have been living-cells for priests.

Entering now the great central area of the palace lying east of the fore-court we find ourselves in an open water-court which was terraced and beautified by trees. Presumably it supplied water to the entire establishment.

On the right, south of the entrance, there is blocked off another principal segment of the palace. An entrance from the terrace with indications of two piers opens upon a courtyard facing an important group of rooms, drawn on the plan of a town house. To the left of this courtyard are divisions set off by a corridor and ending at the south wall. On the right of the courtyard of these central living-quarters is another corridor ending in an exit from the palace in the outer south wall. At the west of this passage are two smaller groups of rooms, one a little larger than the other, with a considerable courtyard of its own. Again both of these, in plan, are town houses. This whole section may have served for the residence of officials and the administration of the palace. It may be remarked that within the palace there are neither kitchens nor servants' quarters.

Opposite, on the left of the water-court, there lies the balancing feature, a space of equal dimensions set off for a zoological garden. Three entrances from the north terrace of the great court lead into a narrow corridor, once covered, running the full length of the terrace. A row of 14 substantial bases of mud brick piers and 14 bases of pilasters served for security against the movement of animals. From the corridor three similarly spaced doors lead on into the middle portions of this section of the building, three in number, two of which are free of partitions and appear to have been yards open to the sky for the browsing of the pets by day. The other, partly covered, stands to the east and adjoins a lodging, perhaps, for a keeper of the garden.

Continuing the description of this section of the palace, the three innermost subdivisions, each preserving indications of the bases of eight heavy piers, must have been wholly roofed. Here were the stone and cement mangers realistically decorated with bulls and the semi-domesticated ibex and gazelle. No more of these mangers were found this year. No other examples have come to light in Egypt, but their prototype is known as early as the Sixth Dynasty in the tomb-reliefs of Mereruka at Saqqârah¹.

To the east of the zoological garden and offices of administration a passage of varying width cuts across the entire palace from a north gate to a south gate, and sets aloof the royal living-quarters. The northern end of this passage had an intermediate door closing it off at the area of the water-court. This part of the palace furnished admission to the zoological gardens on the one side and to the quarters of women on the other.

To the ordinance of the royal women was given the north-east corner of the palace. It was a secluded group of twenty-one small rooms, two staircases and a passage room, of different forms and dimensions, opening upon an ambulatory shaded by a colonnade, sculptured and painted, of 27 columns and two pilasters, the limestone bases or indication of bases of which still remain around a small sunk garden in the centre. This garden, divided gridiron-wise into flower beds, was surrounded by a little water-course. The source of this runlet brought by a cement channel under the pavement to the garden has been further sought this year at the great water-court, but in vain.

¹ G. DARESSY, *Le mastaba de Mera*.

Fragments of gold leaf and delicate gilded furniture, a small naked clay figure of a woman, a figure of Taurt, and necklace beads mark these quarters as the abode of women. It is astounding that these rooms are not larger than prison cells or bathing cabins (Pl. III, Fig. 1), and bear no reflex of any charm of life, no indications of great ceremonies or splendid equipage. It is natural that nothing of importance was found in the palace, since it was cleared of its furniture and its gates bricked up by the royal family, when it seemed to their advantage to hasten back to Thebes to avoid the gathering storm of fury.

Balancing the quarters of the women and forming the south-east corner of the plan is a hall (Pl. III, Fig. 2), the roof of which was carried by 45 mud brick piers indicated by bases. One door in this hall opens to the south end of the transverse passage near a south gate, and another leads into a small yard. On the east and west sides of this yard bases of four piers indicate a portico shading the entrance to four narrow rooms. The rooms on the left are longer than those on the right. A flight of stairs rises on each side of the yard. This suite of apartments may have been for men who were in attendance upon the royal presence.

Between this architectural unit and the gynaeceum are enclosed the innermost halls and chambers of the palace. On the main axis are the foundations of a monumental entrance from the east terrace, a water gate opening into a hypostyle hall with evidence remaining of the 26 limestone columns. From this hall a central door leads into a narrow hypostyle hall marked now by the bases of a double row of 12 limestone columns, and finally this narrow hall opens into a room in a position dominating the whole plan of the palace. This room is 5.5 metres by 5.75 metres in area and has two limestone column-bases in the middle, two metres on centre (Pl. IV, Fig. 1).

A dais, large enough for a state chair, is applied to the heavy exterior wall between the two columns, and could be seen from the pool through the three successive entrances which served as a series of veils to shade the presence. This group of rooms may be compared with the *adytum*, varying in form and alignment, in the palace of Ramesses II in his "residence temple" the Ramesseum at Thebes, in the palace of Ramesses III in the temple at Medinet Habu and in the palace of Merenptah at Memphis.

The narrow intermediate hall of 12 columns has two side doors opposite each other opening upon short corridors with a window in the end to which access was given by six steps and a landing. These windows, like the *Tabsar*¹, a place of observation in a Persian palace, overlook the enclosed courts in opposite directions into the quarters of the women and of the men. The short corridors have access to the central hypostyle hall through sections symmetrically composed on the two sides of this hall. The north section has four quarters of the women through a passage which has the marks of a row of five columns down the centre, passing through the cement foundations of what appears to have been an ablution stone, and the other two doors enter the larger hypostyle hall. On the corresponding side of the hypostyle hall two similarly located doors give access to the opposite section of the balanced group. This section has a narrow passage showing the bases of 8 sandstone columns running east and west. Upon this columned passage open five rooms.

¹ *Philadelphia Museum Journal*, VIII, No. 4, Dec. 1907. FERGUSON, *Palaces of Nineveh and Persepolis*, 181.



1



2

El-Amarnah. The North Palace.

1. The women's quarters. 2. The south-east hall.





1



2

El-'Amarnah. The North Palace.

1. The throne room. 2. A bath room.



One of these rooms (Pl. IV, Fig. 2) is a bath-room composed of two divisions, the outer, 4×2 m., separated from the inner, 2×2 m., by a low limestone moulding architecturally broken for an entrance at the centre, perhaps curtained off from the outer part of the room. In the forepart at the right of the entrance of the bath is a stone catch-basin set into the floor to receive waste water through a hole in the moulding. The waste water was dipped out of the basin. The floor of the bath is of irregularly shaped flags of limestone. The dado of the room is of white plaster to protect the mud wall from the splashing of the water. The plaster was carelessly spattered with red and blue paint by the painters, who had not been at pains to rub it off. This amazing negligence would be inexplicable were it not that indifference and haste mark the work of the artisans throughout the palace. The bath, even to the limestone moulding, is a replica of baths in the palace of Amenophis III at Thebes¹. In the next room east of the bath there is a recess filled by a slightly raised floor where probably stood a bed. A staircase of usual construction and a small passage near the opening into the yards of the men's quarters and finally a small door opening on the short corridor, complete the south section. There is no drainage in the palace.

From the short corridors, again, symmetrical doorways, equidistant from the alternate sides, lead eastward into halls each with the bases of eight piers. Into these halls opens a row of three chambers buttressing the Throne Room (Pl. V, Fig. 1). The little halls may have been dining-rooms, and the small rooms on each side pantries or closets where the wine was brought up for immediate use. Fragments of wine jars and their mud sealings stamped "Wine of the House of Aten," "Good wine of the House of Aten" abound. Bunches of grapes modelled in mud and covered with blue glaze, which are found in quantities in these halls, indicate a fallen moulding or cornice.

These sectors were originally without divisions, but later, though while the royalties were still in residence, they were divided by four low partitions about half a metre high extending from the east wall to the centre piers, and from the west wall to the centre piers. Proof that these partitions are an afterthought lies in their having been built into the basis of the already decorated piers. Subdivision of rooms, later but still in royal times, as similar evidence establishes, occurs in other parts of the building.

This remodelling, however, is clearly to be distinguished from the rough construction hastily run up in a day by occupants of parts of the palace after the royalties had departed. The evidence of such huts in the women's quarters recorded last year was extended this year. In this way the eight small rooms which we have called the men's quarters in the south-east corner of the palace were actually transformed into simple houses of the type of those in the workmen's compound under the rock-tombs. In fact, the remains of ovens and furnaces, set up at random, serve to show a wide invasion throughout the palace. These are the traces of wreckers who gutted the palace of its stone and, when the destinies of Egypt had passed to stronger hands, turned the palace of this despised king into barracks while they worked.

A few more pieces of Minoan pottery of L.M. III type have been found this year widely scattered throughout the palace without further evidence of their date or use. Four poor burials, two in rough terra-cotta coffins, had been thrust into the central southern section of the palace.

The painting found last year by Mr. Newton in the women's quarters established the scheme of decoration for the entire palace. It was a highly adorned and gloomy edifice.

¹ *Bulletin of the Metropolitan Museum of Art*, Supplement, 1916-17.

The northern rooms of the women's quarters were cleared this year. They are not only, as was indeed obvious last year, the largest rooms in this group, but they present, although in fragments in fragile condition, the most elaborate remains in the palace of its painted decoration, and they form a contribution as important as anything we now possess in the entire range of fresco painting of the school of Akhetaten. Mr. Wilkinson has traced and drawn in about 12 feet of this fresco, showing designs of papyrus, lotus, a kingfisher and birds including a dove. However, beyond this unexpected addition to our specimens of the art, disappointingly little painting has remained to be recorded in the southern half of the palace, and nothing to be added to our knowledge.

Save only that the colour of the dado changes from black to blue in the more central parts of the palace and is sometimes yellow at the stairs, the same scheme of decoration, in a kind of stencilling, was repeated along the entire length of the inner walls of the palace from room to room and compartment to compartment inside and out, including even the zoological garden. Above the dado are bands of alternate blue and red, each divided by a narrower band of white. Above this is a narrow band of *kheker*-pattern. These bands cover a width of about 40 cm., reaching a total height from the ground of 110 cm. The red and blue bands return at the corners and run vertically up the walls and return again along the top, thus making a framed panel, invariably painted yellow, on which were drawn figures of men, birds, fish and large pots. The handling of the larger birds is like that in the representation of the phoenix in the tomb of Queen Nefertari in the Valley of the Queens at Thebes. Throughout all the rooms the ceiling was painted to represent a trellis on which a grape vine was trained to carry its full leaves and hanging clusters, thus bringing the whole palace into the similitude of an arbour. The vine in Egypt must have always been a motive of design associated with rich memories. The ceiling of the tomb chapel of Sennufer painted in the reign of Tuthmosis III or Amenophis II represents the sanctuary as a grape arbour. The decorations in the Villa Papa Giulio at Rome mark one stage of the road along which the ancient design has been brought to modern times. Narrow rectangular arbours are not infrequently seen to-day along the Nile, a mass of foliage in December gardens. The *sâkiyah* too is commonly shaded by vines from the sun's heat. The floors of the palace are of well laid mud brick. No painted pavement has been found.

Compared in size with the larger palace of Akhetaten which stood near the great temple in the centre of the city, this palace to the north is but a villa. The full ground plan of the Great Palace has not, it is true, been recovered, but it is natural to suppose, from the indications, that it had much in common with his father's palace at Thebes. That palace of Amenophis III consisted of a number of vast rambling one-storey structures built successively from time to time on the flat desert between the high Kharnah mountains and the cultivated land. The North Palace, on the other hand, was designed and built as a single undertaking. It is an example of the fully developed type of the Egyptian palace of the Eighteenth Dynasty. Its component parts are the once isolated buildings or *inulae* of the earlier type of palace-group here brought into the unity of a final consolidation and organic fusion. In its evolution this palace possesses many features in common with the palaces of the Creta-Mycenean culture of the second millennium at Tiryns and Knossos, and with the Asiatic palaces at Lachis and Boghaz-Köi of the fourteenth and fifteenth centuries before our era.

The palace is without the fortifications of the Old Empire palaces at El-Kâb and





1



2

El-Amarna. The North Palace.
1. Dining hall and pantries (?).
2. Store-rooms near the North Palace.

Abydos. It is without the towers and bastions which protect the contemporary Hilani palaces in Asia. Even the attached guard-house on each side of the west entrance of this palace is scarcely more than a sentry box.

STORE-HOUSES.

Lying three or four hundred yards to the north of the palace and separated from it by an unexcavated space, partly of desert and partly of cultivation, there was a clean wind-turned mound running east and west from the sown land to the main highway of the ancient city. This mound was about 75 metres long and 25 metres wide and rose, at its maximum, to about 3 metres. On each side of the mound stretched a strip of native planting, showing the method by which the peasants stealthily incorporate the desert into their annually increasing acres.

We set to work at the east end of this mound to clear westward and found ourselves in a construction divided almost equally in the direction of its long axis into three sections. The central section rising gradually toward the west presented an inclined street or ramp. This ramp is $7\frac{1}{2}$ metres wide, constructed of a solid filling between two parallel retaining walls without bonding, built of sun-dried brick. Walls and filling went up together. The filling is composed of small stones and broken brick in an aggregate or mastic of Nile mud. Above the filling is a pavement of bricks laid in courses. Similarly constructed of an external facing of brick with a filling of tamped or rammed mud, walls of about $2\frac{1}{2}$ to 3 metres, in some instances even wider than the bins, appear at irregular intervals to the right and left of the ramp (Pl. V, Fig. 2). Ramps and bins were inclosed by walls approximately $2\frac{1}{2}$ metres in width and diminishing towards the top on the outer surface. The capacity of the average bin would approximate to 28 cubic metres. Near the east end of the south side of the construction remain two fragments of walls running parallel to the long axis and abutting on the first right angle wall. On the south side at intervals varying from 3 to 11 metres are thin party walls also at right angles to the ramp. On the north side are five similar thin fragmentary partitions running perpendicular to the ramp and near the centre of the construction one longitudinal partition.

These divisions suggest a number of rooms, differing in dimensions, but all included within the exterior wall of the structure. The east end of the structure facing the highway has been sadly destroyed, but as we worked up the ramp and into its flanking divisions we reached a more regular or less disturbed part. Here, approaching the highest point of the structure, we came upon a plan of symmetrically balanced rectangular rooms, perpendicular to the main axis. On the north, only the two easternmost of this series of contiguous chambers have continuous walls remaining on four sides. The five chambers farther west, having a common width and length, are from 1 to $1\frac{1}{2}$ metres longer than the first two chambers. On the south side, similarly, only the two easternmost rooms accompanying the descent of the ramp toward the west are fully inclosed by walls. The four succeeding rooms, westward, of equal breadth, are not longer than the first two, although they now vary in length among themselves by reason of irregular encroachment of the cultivation.

This is an important fragment of a large building, the original outline of which, on all sides, has been obliterated by cultivation and traffic.

Sufficiently near the palace, this structure appears to have been one of a group of buildings in the category of store-houses. More narrowly it possesses the architectural

character of a granary of the rectangular sort. Examples of both circular and rectangular types of granaries, common throughout Egyptian history, are found at El-'Amarnah¹, and at El-'Amarnah both are found with ramps. The double silo discovered by Dr. Borchardt has, on plan, the form of a pair of scissors². What corresponds to the closed blades creates a long, sloping ascent to the top. Earlier at El-'Amarnah Sir Flinders Petrie found a similar slope rising to conical chambers by which he concluded labourers reached the opening at the top³. At Pithom M. Naville found a number of non-communicating rectangular chambers, of regular size, opening at the top, which he believed to have been store-houses for grain. A row of magazines, cut in the *gebel*, remains to the south of the Palace of Amenophis III at Thebes, and one might lengthen the list.

This newly discovered building at Akhetaten is of a simple and sound construction furnishing a series of bins, of the regular type, for storage. Confirmation of the theory that this building is a store-house for grain is given by the sculptured scenes in the rock-tombs at Akhetaten. These reliefs are a touchstone to test the theories of all discoveries in this city. Life and its local pictorial representation were here contemporaries.

No vestige of the superstructure of the building remains, and all indications of the entrances, save one on the south side corresponding to that in the tomb-drawing, have perished. But near this entrance, from the south, was found a fragment with roughly carved uraei with traces of red ochre which may have surmounted the cornice over the door, like the "warning" uraei over the corresponding entrance in the tomb-picture. Furthermore, the remaining walls in the building itself are battered and would, if reconstructed, produce a façade in the form of a truncated pyramid, like that shown in the representation of the granaries in the tomb of Meryrē I. Looking at the drawings in the tomb of Meryrē Mr. Davies says, "They must have been substantial erections made, no doubt, of Nile mud and owing their form, perhaps, to a memory of the pile of sheaves on the threshing floor⁴." The architect who sketched the granaries in the tomb of Meryrē I may have been drawing this identical building.

FOUNDATIONS OF BUILDINGS AT THE EXTREME NORTH OF THE CITY.

About a mile to the north of the store-houses where the bow of the eastern cliffs turns to meet the river and closes the desert bay in which the city of Akhetaten stood are two *waddis* formed by torrents descending from the high desert. Between these watercourses the rocky ground gradually slopes from the cliffs down to the river, forming an area in which remain destroyed foundations of several constructions. These, though not synchronous, are almost contemporaneous with the limits of the occupation of the city, which scarcely outlived its builders (Pl. VI).

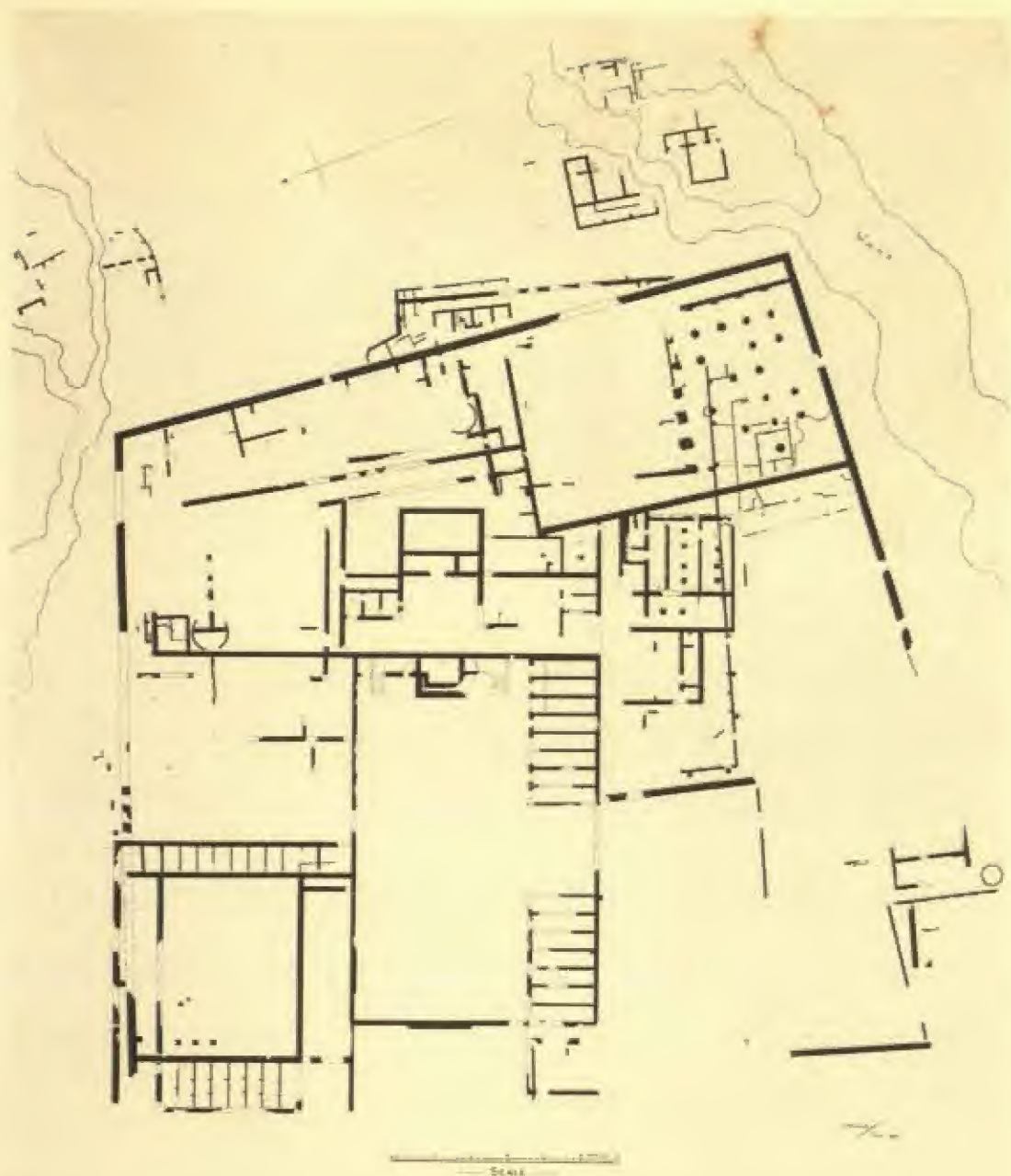
At least three different constructional schemes commingle in this place. First, determined by the irregular contour of the site, adapting itself to the site and almost completely filling it, are the remains of heavy walls about one metre thick. These walls are well preserved only on the east side; the north side shows several broken sections running almost to the ancient

¹ A. ERMAN, H. RANKE, *Aegypten und ägyptisches Leben im Altertum*, 521.

² BORCHARDT, *Das ägyptische Wohnhaus im 14ten v. Ch. Jahrh.*

³ W. M. F. PETRIE, *Tell el-Amarna*, Pl. XLI.

⁴ N. DE G. DAVIES, *El Amarna*, I, Pls. XXV-XXX. Cf. *Ptakhetept I*, Pl. XVIII, 401.



El-Amarnah.

Plan of buildings at the north end of the city.



1



2

El-'Amarnah. Buildings at the north end of the city.

1. Steps in central court.

2. South side of central court.

highroad; the walls on the south side are lost about midway to the highroad, and of the walls on the west side nothing whatever remains. Inside the heavy east wall in the south-east corner is an approximately rectangular space drawn by two lighter walls. Within this rectangular space are fragments of foundations of a still lighter, unidentified structure and the foundations of bases of columns and piers. To the north and west of this rectangular space are confused fragments of walls; the isolated fragments of walls lying to the west extend this unit of construction almost to the western limits of the area of the site.

This heavy construction, wholly un-Egyptian in its irregularity, outlined on a large scale to fill the entire site—perhaps the plans of the king's first typographers and architects of the city—may have been disapproved, and commands may have been given for another building in its place smaller and headed in another direction, more pleasing to the Egyptian eye.

As far as space was needed for the new composition the first structure was erased leaving no clue to its significance. A second, totally independent geometric structure of smaller scale with its axis differently oriented was superimposed to take its place.

The new rectilinear composition remains but a fragment itself. A central block 32 metres by 50 metres comprises an open court on the south side of which is a row of foundations and remnants of foundations of twenty chambers. The configuration of the slope made impossible the construction of a corresponding series of rooms on the north side of the court.

To the north of this central court lie the foundations of another block about 35 metres by 32 metres. This block contains a central yard and two rows of rectangular chambers opposite each other on the east and west. Equal spaces on the north and south sides of the block are without indication of divisions. The central court of this north block has three foundations of square piers on the west side, giving indication of a colonnade. The northern block extends toward the west 12 metres beyond the remaining western foundation of the central area. To the east of the north block is an area with partitional fragments equal in size to half the central block.

At the east end of the central block and on the central line of the courtyard is a double wall built around an outcrop of rock forming a platform, measuring from the exterior formation about 6×6.5 m., to which a double flight of steps gives stately ascent, breaking inwards on the central axis (Pl. VII, Fig. 1). On the east side of this platform is a low raised mud brick pedestal, 1.4 m. \times $.55$ cm. Beyond, farther to the east and higher up the slope, but still on the main axis, are three successive divisions terminating the eastern extremity of the composition, 15 metres from the platform.

On both sides of the three easternmost rooms are party walls, and to the south of these walls is a group of small rooms belonging to the geometric structure containing bases of central piers.

Thirdly, scattered over the entire site and climbing both sides of the *wādīs* to the foot of the cliffs are remnants of dwelling-houses with gardens and granaries similar to those known throughout the town site. The only stone facing and almost the only stone fragment remaining on the site is the threshold in the easternmost of the line of chambers on the south side of the central court. Small fragments of plaster painted red were also found in this room. In the courtyard (Pl. VII, Fig. 2) near the central platform and in a position below it, near enough to have fallen from a *baldacchino* over the platform, is a fragment of painted fresco from a ceiling showing a geometric design in which volutes are

composed in signs of infinity with the intervening spaces centred with rosettes. This design is found in the ceiling in the tomb-chapel of Userhêt, Tomb 51, Kurnah.

It is not strange that little is to be deduced from the foundations of these buildings. Like other buildings of the city they were destroyed by violence. From time to time waters have torn their way across a large part of the site, carrying off foundations and scattering it with mountain pebbles. It has been for centuries an inexhaustible source of *sebdkh*. All that can be said at present is that here was a great building which gave monumental significance to the north entrance of this experimental and ephemeral city of Akhetaten.

Pl. VIII is a small limestone statuette found in these northern buildings. It has been retained by the Cairo Museum.



El-'Amarna.

Limestone statuette from the northern buildings.

About natural size.





THE ALLEGED KANARESE SPEECHES IN P. OXY. 413

By L. D. BARNETT

The Greek farce published in 1903 by Messrs. Grenfell and Hunt in *Oxyrhynchus Papyri*, Part III (no. 413, pp. 41-55) contains a number of words and sentences in what purports to be an Indian dialect, and these immediately attracted the attention of several specialists in Indian languages, who endeavoured to interpret them. The most important contribution in these investigations was that made by Professor Eugen Hultsch, which appeared in *Hermes*, XXXIX, 307 ff., and was republished in an English translation with some correction in the *Journal of the Royal Asiatic Society* 1904, 399 ff. Dr. Hultsch here maintains that the language presented in the fragment is Kanarese, and endeavours to interpret it accordingly. His thesis seems to have been generally accepted, which is very natural, in view of the high reputation which he deservedly enjoys as an authority on Sanskrit and the Dravidian languages. In spite however of his admirable scholarship I venture to doubt the soundness of his position.

The papyrus is of the second century; the farce therefore is of that date, or possibly earlier. Now we have no direct knowledge of Kanarese of such an early period. The earliest extant work in Hale-gannaḍa, or Old Kanarese, is the *Kavi-rāja-mārga*, a treatise on the art of poetry by a certain Kaviśvara who flourished about the ninth century. Tamil, which in its ancient form is closely akin to Old Kanarese, possesses a corpus of poetry ascribed to a *Śaṅgam* or academy, for which much greater antiquity is claimed; but it is very doubtful whether this claim will bear critical investigation, and probably the *Śaṅgam* literature, at least in its present form, is considerably later than our papyrus. Obviously then we need to be very cautious in accepting as Kanarese any words in so early a text: if a proposed reconstruction agrees with the rules of the oldest classical texts, we may admit it, but only provisionally and with reservations, and if on the other hand it shows features of the mediæval or modern dialects we must unhesitatingly reject it. This is our first criterion. The second is that interpretations must make good sense and be natural and unforced; the third is that the interpreter shall not unduly alter the text. Judged by these criteria, most of Dr. Hultsch's readings seem to me to be unconvincing.

The word ζοπιτ is interpreted by an actor in the play to mean πειν δὸς ταχέως. Dr. Hultsch assumes that it means simply ταχέως, emends it to ζοτιτ (a double begging of the question), and equates it with *jhaṭiti*, a bookish Sanskrit word which we have no reason to suppose was used in colloquial Kanarese of the second century, though the derivative *jaḍiti* appears in writings of the mediæval period. He then deals with the word κοττως, which he says means the same as ζοπιτ—wrongly, for no interpretation of κοττως is given in the play. He explains κοττως as Kanarese *kuḍisu*, "cause thou to drink" (imperative of the causative stem of *kuḍi*, "drink"), which historically seems quite possible.

But even if we assume (begging the question) that it means "give a drink," phonetically *κοττως* is a long way from *kuḍisu*: *κο-* may represent *ku*, but *ττ* is too much for *ḍ*, *ω* will not square with *i*, and the final *u* of the supposed Kanarese is not represented in the Greek. We may note here that most Old Kanarese words end in vowels, nasals, or liquids, and abhor consonantal endings. This applies to the next equation.

The word *βραθις* is explained by an actor as *εἰς τὰ μερίδια λάχωμεν*, "let us share in the parts." Dr. Hultzsich identifies *βραθις* with Kan. *bēr-āḍisu*, which he translates as "let us play separately." This is wrong. *Āḍisu* is 2nd pers. sing. causal imperative of the root *āḍu*, "play, act," and thus means "do thou put into play, set into activity," or the like. *Bēr* is properly a substantive meaning separation or difference. Whether *bēr-āḍisu* could signify "make [us] play separately" seems to me rather doubtful; the natural meaning, I think, would be "put into play a change or difference." But even admitting the former interpretation as possible, we must recognise that the resultant sense is very far from the Greek, and is also nonsense, for if the actors are to play they cannot play *separately*, but must play together.

Dr. Hultzsich's invention takes a higher flight when he comes to deal with the words *βερη κονζει δαμυν πετρεκιω πακτει...βερη...πετρεκιω δαμυν κινζη παξει*. He takes *βερη* as Kan. *bēre*, which he says is "an emphatic form of *bēr*" (in point of fact it is an instrumental case of *bēr*, used adverbially), and which certainly means "separately" or "differently"; *κονζει* and *κινζη* he equates with *koñca*, "a little"; *πετρεκιω* he takes as *pātrakke*, dative of *pātra*, "cup"; *δαμυν* and *δαμυν* he explains as "a transposed form" of *madhu*, "wine"; and *πακτει* and *παξει* are "perhaps an incorrect rendering" of *hāki*, "having poured." Here we may admit that *bēre* is a good Old Kanarese word. But *koñca* is quite modern, and moreover would require in the old language a case-ending to be added to it; to alter *δαμυν* and *δαμυν* into *madu* is against all rules of sound criticism; although the equation *πετρεκιω* = *pātrakke* is tempting, the resemblance of the vowels is not so close that we dare ignore the difficulties and also assume the use of the Sanskrit *pātra* in colloquial Kanarese of this period; and lastly *hāku*, of which *hāki* is the gerund, is again quite a modern word. Moreover, we must point out that *bēre* is in the context obscure. Dr. Hultzsich translates *bēre koñca madhu pātrakke hāki* "having poured a little wine into the cup separately." If by "separately" he means "severally" (i.e. "having poured...into each cup") we should rather expect the reduplicated form *bēre-bēre*. In any case we do not know the meaning of the passage, and the assumption that it has the sense assigned to it by Dr. Hultzsich is somewhat of a *circulus vitiosus*.

Dr. Hultzsich next takes up the words *πανουμ βρητι κατε πανουμ βρητουουεμ*, emends *πανουμ* to *μαδουμ*, and produces the sentence *pānam bēṛ etti kaṭṭi madhuṃ bēṛ ettuvemu*, which he translates "having taken up the cup separately and having covered (it), I shall take wine separately." The reader will doubtless be struck by the overpowering affection which these Indians display for the little word *bēr* or *bēre*: they use it in every phrase, and it never seems to have much sense. Seriously speaking, we cannot understand the meaning of Dr. Hultzsich's translation. Moreover, it may be questioned whether it is a correct translation of the supposed Kanarese words. *Pāna* (a Sanskrit word, by the way) means not "cup" but "drink"; the combination *etti kaṭṭi* suggests rather the idea of raising up a construction, such as a building; and in the old language the future of *ettu* should be *ettuvem*, not *ettuvemu*, and the radical meaning of the verb must be the same in the gerund *etti* as in the future *ettuvem*. Thus even if we admit Dr. Hultzsich's questionable renderings of

bēr and *kāṭṭi*, we must translate the sentence: "having separately taken up a drink [and] covered [it], I will separately take up wine." This is nonsense.

Dr. Hultsch's only other equation is $\pi\alpha\rho\alpha\kappa\omicron\upsilon\mu = \textit{parāku}$, "attention!" As *parāku* is of doubtful origin, and the meaning of the passage where $\pi\alpha\rho\alpha\kappa\omicron\upsilon\mu$ occurs is obscure, the equation cannot be said to confirm Dr. Hultsch's theory, which on all points seems to be unproven.

What then is the language of these Indians? I confess I do not know. It may be mere gibberish, concocted in a spirit of rollicking farce; and it may equally well be meant for some Indian dialect, either Aryan or Dravidian. But if it is an Indian dialect it has yet to be interpreted.

THE EGYPTIAN NAME OF JOSEPH

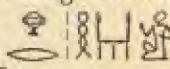
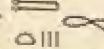
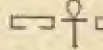
By EDOUARD NAVILLE

Twice already I have written on the Egyptian name of Joseph, in order to explain how that name was to be translated. On the last article, which was published in 1910¹, the Hebrew scholar Prof. Koenig, in an addition to his Dictionary, says: "The title of Joseph is explained by Naville as 'the head of the house of learning,' and this explanation corresponds exactly to the circumstances in which the title was given."

Lately Mr. Engelbach, quoting this explanation from my first book, says: "Naville suggests that Zaphnath-paaneah represents the Egyptian *ṯst nt pr ʿnh* or 'Officer of the House of Life' (College). Apart from the fact that Joseph's appointment was in the Department of Agriculture and not in the Public Instruction, the now accepted equivalent *ḫpꜣꜣꜣ* (in *ḫpꜣꜣꜣ = sh pr ʿnh*) for *pr ʿnh* rules out this possibility."

In this quotation there are two mistakes. I have not given the name in the German transcription, which I reject, and I have not translated "officer of the house of life (college)," but "the head of the school of learning, of the sacred college." This explanation is to be ruled out because Mr. Engelbach does not accept it, and because Joseph is to be appointed in the Department of Agriculture and not in Public Instruction. Thus, the Old Egyptians had already, in the administration, distinct departments with their officials, one of which was Public Instruction! We shall be thankful to Mr. Engelbach if he will tell us what this Department of Public Instruction was, and in what consisted the activity of its officials.

I am now going to show that Mr. Engelbach's transcription is based on a wrong principle and is against common sense. In order to understand the meaning of Joseph's name and why it was given to him, let us picture to ourselves the scene in which this took place.


There is evidently a numerous assembly of Pharaoh's court and its officials. The king has had a dream, very different from usual dreams; his spirit is troubled and he wishes to know the meaning of his dream. "He sent and called for all the magicians of Egypt² and all the wise men thereof." These men were called in Egyptian  or  and they came from a college or school called , *pa-anḫ*. On a stele relating the sending of a magician to exorcise a princess, the king calls together all the members of the college and chooses one among them³.












Reverting to Joseph, we see that Pharaoh told his dream to the magicians, but there was none who could interpret it to Pharaoh. Then Joseph is called, and he interprets the dream; the king heaps on him all kinds of honours, and Pharaoh called Joseph's name Zaphnath-paaneah. Now, common sense indicates that this name must be connected with what comes before; it must have a reference to what Joseph has done. The whole of the

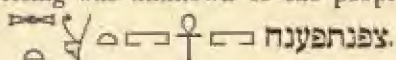
¹ *Proc. Soc. Bibl. Arch.*, Jan. 1910.






² The Revised Version has a marginal note "or sacred scribes."

³ Rougé, *Étude sur une stèle égyptienne*, 72 ff.

 is there; all members of the college have proved absolutely unable to interpret the dream; but Joseph, more discreet and wiser than all of them, has given the explanation. Henceforth it is to him that Pharaoh will apply in the interpretation of his dreams. Therefore Joseph will be the head of the college of the magicians, he will be their master. Pharaoh calls him "head of the sacred college." That was the way of appointing, in that time and often at the present day. Pharaoh calls him so in the presence of all the magicians, who will know that he will be their chief. His title is not registered by a chancellor or by an official of what Mr. Engelbach calls the Department of Public Instruction. It is doubtful whether it is put in writing. It is called out by the king and will be repeated by the hearers and spread among the people.

The title "head of the sacred college" is known by an Egyptian inscription. In the Sed festival which King Osorkon celebrates at Bubastis we see behind the king a procession headed by the           






in the foreign word sounds and especially syllables which are familiar to him. Hundreds of examples might be quoted of such deformation of a word, because part of it contains signs unknown to the transcriber or which do not exist in his language; he has to replace them by letters familiar to him, which give a sense that has nothing to do with the word. This, which we constantly see in our time, must have occurred much more frequently in antiquity, when writing was unknown to the people who could repeat the names only as they heard them. . The last part of the name corresponds exactly in Hebrew and in Egyptian.

It is well known that  drops its  in composite words, Pithom, Pibeseth¹. As for the first syllable, the Hebrews know no word beginning with  or  while they have a considerable number beginning with  and therefore they gave the first syllable of Joseph's name a form which makes it sound like one familiar to them.

Being thus named, Joseph would be called by his highest title, as it is always the case with men having a high appointment. He would be for the public the head of the sacred college, just as we say the Archbishop or the Shêkh of Islam, whatever be the dignitary's own name. The Semites would repeat this name in a form which was not altogether foreign to their language.

Where is philology? What has transcription according to definite rules to do in this case? Those who pronounced the name repeated what they had heard. And when a Semitic writer related the scene, perhaps long after it had taken place, he wrote down what the people spoke, perhaps for the first time, and he did not consult an Egyptian text to see whether his transcription of the name agreed with rules of philology, of which people at that time had not the remotest idea. In this case, we have here only a deformation of the first syllable, and there is not a popular etymology such as we find in *beefeater* for the French word *buffetier*.

Mr. Engelbach's explanation is based on an absolutely wrong principle. Transcriptions are not made according to philological rules, they are made by the ear, from the spoken language, and I am not going to give up my translation for his, which has no sense, and which I cannot consider as accepted except by himself. Zaphnath-paaneah means "the head of the sacred college, the college of magicians," to whom Joseph had shown himself vastly superior, so that henceforth he was to be their master.

¹ It is doubtful whether  must always be read *per*. The Tanis Papyrus reads the sign  . The common word  is never written with  alone.

² On these transcriptions, see F. DE SAUSSURE, *Cours de linguistique générale*, 244. L'étymologie populaire.



Air photograph of the site of Karanis.

Twenty-nine years had elapsed since Grenfell, Hunt and Hogarth had last dug at Karanis. In the interval the mound had been subjected to the unceasing attacks of *sebbakh* diggers, who had operated with light railways, as well as with the usual beasts of burden. The extreme eastern and western parts of the town had practically disappeared and the southern face of the mound had been plundered extensively. A great gap had been made in the centre of the mound stretching from its southern nearly to its northern limits. Around this irregular, crater-shaped, hole the remaining portions of the mound formed a sort of rampart, in some places thirty or forty feet high. See the air photograph, Pl. IX, and the key to it, Fig. 1.

Work on the present top levels brought to light foundations and, in some cases, the lower storeys and basements of houses dating from the fourth and fifth centuries A.D. These were carefully measured and a plan was made which showed both the streets or lanes and the ground plans of the houses in so far as these could be recovered. When this survey had been completed, the remains of part of this top level were removed to permit the examination of what lay beneath. It was then found that the fourth-century buildings in this section of the town had been built above the ruins of earlier structures in such a way that in some cases the foundations of the upper layer actually rested upon walls of the earlier, although built at an angle to these and not following their alignment. The ruins of this earlier level were in a better state of preservation than those above. The mud brick employed was of better material and more carefully made. In addition, the houses and streets were filled with sand and fallen brick and this support had kept many of the walls in position to a considerable height. Care had to be exercised in removing this filling in order to avoid the immediate collapse of parts of the buildings. In many houses the basements were intact, and above these the walls and stairways of two storeys were still standing, but the roofs and the ceilings of first storeys had fallen in. On the basis of coins and papyri the buildings of this level could be definitely assigned to the second and third centuries A.D.

The interiors of many of these houses had been covered with a white plaster decorated with designs in colour. In one case this mural decoration was exceptionally well preserved. The east wall and the adjacent portion of the north wall of a room still retained their coating of plaster on which was painted a row of male and female divinities in a style which closely resembled that of the well-known Fayyûm portraits. One, a male figure, was seated on a sort of throne, but the others were standing. A bull, a Cerberus with his three heads, and other symbolic figures accompanied the deities. Unfortunately, the heads of most of the figures were so badly defaced by the crumbling of the plaster that their identity is somewhat uncertain. However, it is probable that in its original condition this decoration extended all around the room, which may have been the chapel of some special cult.

Towards the close of the season it was decided to thoroughly excavate a large stone temple, which had come to light in the previous year in the northern part of the central area dug out by the *sebbakh* in. In clearing the approaches to this temple excavations were carried down to the original ground level, and foundations belonging to the lowest layer, presumably Ptolemaic, were laid bare. The temple itself was carefully built of well cut local limestone, and rested upon a bed of rough stones which had been laid in the ruins of earlier buildings. The style of architecture is Hellenistic-Egyptian and the plan differs in many respects from that of the other temple, about a quarter of a mile to the south, which was studied by Grenfell and Hogarth's expedition in 1896. With its two advanced pylons it bears a great resemblance to the temple of Pnepheros at Theadelphia, now partly re-

constructed in the courtyard of the Museum at Alexandria. However, there are many unique features about the design of the temple proper. Since no dedicatory inscription was found, it is not certain to what god or gods the temple belonged. An embalmed crocodile, a hawk-headed crocodile in limestone, a small incense altar, some pottery vessels, and the fragments of an enamelled pectoral were all that was found in the temple. But two large altars which lay outside the precinct obviously came from one of the outer courts. One of these altars bore an inscription to Sarapis, with a date no longer decipherable, while the other had on two of its four faces the head of a bearded divinity. It is possible that the temple was dedicated to Sarapis, whose cult had been grafted on to that of a local crocodile god.

The fourth and fifth century houses had been plundered in great part and so did not produce any great wealth of coins, papyri, or household utensils. However, those of the lower level yielded a rich collection of objects of all sorts. The number of fine pieces of glass recovered in perfect condition was very remarkable. Two considerable hoards of coins were found, one containing about 1000 small bronze pieces, the other 860 tetradrachms. There were a good many ostraka, principally of the second and third centuries.

Literary papyri were very scarce. The most important was the last column (23 lines) of a discourse on Homer by Alcidas. Part of a roll of the *Iliad* contains several columns, beginning with line 308 of Book I. Documentary papyri were numerous. The most interesting were a group of petitions, in an unusually good state of preservation, addressed to *strategoi*, *epistrategoi*, and Prefects of Egypt, dating from Antoninus Pius to Caracalla. Possibly they represent part of the archives of the office of the *kouogrammateus* of Karanis. They were unearthed in a courtyard into which they had doubtless been thrown as rubbish from one of the adjacent houses.

No Coptic texts of any sort were found, but there were several fragments of a Demotic document, the verso of which contained Greek writing.

Work at Karanis was resumed under Mr. Starkey's direction at the end of October 1925. It is hoped that it may be possible to continue the excavation until the site is thoroughly investigated, so that it may be possible to reconstruct the topographical and cultural development of this typical Greco-Roman town of the Fayyûm.

A DRINKING SIPHON FROM TELL EL-'AMARNAH

By F. LL. GRIFFITH

In *The City of Akhenaten*, Part 1, fig. 5 on p. 24 represents a group of three objects of lead, now in the British Museum, Fig. 1. They were found in 1921 in the house N. 49. 20 on the north side of Street C, along with two fine little lecythi of variegated glass and the unique fish-vase of the same material. All these had been stowed away in the sand inside the house at the base of a wall (a favourite hiding-place) and being forgotten were eventually covered over by two successive floors of plaster. The metal objects are described as vases but are not explained. One is a narrow mug with pointed bottom and handle, about $3\frac{1}{2}$ inches (9 cm.) high, which might have been used for ladling out small quantities of wine; it would be worth while to ascertain the exact content of this by measurement.



Fig. 1.

The others are a tube jointed at right angles strengthened by a cross bar, the angle being filled by a kind of flower in open work, and a strainer with cylindrical socket. These evidently belong together and are the metal fittings for a siphon or drinking tube the rest of which would have probably consisted of two hollow reeds. The use of the apparatus is admirably illustrated by a stela found many years ago at Tell el-'Amarnah and now in the Berlin Museum (no. 14122)¹. Here a Syrian soldier in festive garb sits on a folding stool with his spear behind him and his wife seated on a chair opposite him. On a stand before the soldier is a deep wine jar with an angulated drinking tube in the mouth, and a boy is giving him the mouth-piece of the drinking tube by which he will be able to suck comfortably at the contents of the jar when he feels inclined; afterwards perhaps his wife will be allowed a pull. (How this picture reminds one of a Turk and his nargileh or hubble-bubble pipe!) In his left hand the boy holds a beaker shaped very much like the metal mug. Unfortunately it has no handle; otherwise we might be inclined to believe that the artist who sculptured and painted the stela was picturing the inhabitants of house N. 49. 20 taking their ease.

The reconstructed drawing, Fig. 2, shows the left hand holding the tube as against the right on the stela. But the Egyptian artist has drawn practically a left hand to the right arm, and in modern Egypt the smoking pipes are held in either hand indifferently.

It may be noted that Erman considered the use of a sucking tube to be a foreign custom introduced into Egypt from the north-east, and quoted the well-known passage from

¹ SPIEGELBERG and ERMAN, *Zeitschr. f. äg. Spr.*, xxvi, 126-129, with a fine photograph; also in ED. MEYER's *Fremdvölker*, phot. no. 829, and on a small scale in SCHÄFER, *Kunstwerke aus el-Amarna*, Bd. II, p. 11.

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Xenophon's account of the Carduchi in the *Anabasis*. He was probably right. In the graves of the Twentieth Dynasty which M. Naville and I excavated at Tell el-Yahudiyah we invariably found, among the remains of vegetable matter in a certain type of large jar¹,

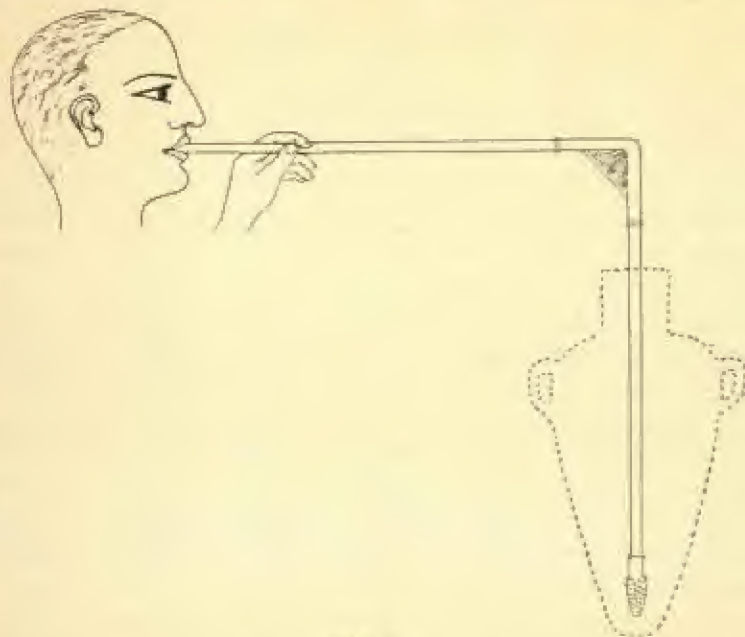


Fig. 2.

objects which I then supposed to be rasps of bronze² but have long since recognised as the strainer ends of sucking tubes; there seem to be no instances of such things from Egypt before foreign influences became strong in the New Kingdom.

¹ *Tell el-Yahudiyah*, Pl. XIV, fig. 5 and p. 45.

² *Op. cit.*, Pl. XV, figs. 20, 21 and p. 46.

PAX AUGUSTA CLAUDIANA

BY PROFESSOR M. ROSTOVITZ

With Plate X.

In his famous letter to the Alexandrians recently published by H. I. Bell (P. Lond. 1912) Claudius, dealing with the honours conferred upon him by the city of Alexandria, says (l. 34 ff.): τῶν δὲ δυοῖν χρυσῶν ἀνδριάντων | ὁ μὲν Κλαυδίου Εἰρήνης Σεβαστῆς γερῶ[με]ρος ὥσπερ ὑπέθετο καὶ προσελεῖπάρη[σ]εν ὁ ἐμοὶ τιμ[ι]ώτατος Βάρβιλλος ἀρνούμενου | μου διὰ τὸ φορτικώτε[ρο]ς δ[οκ]εῖν, ἐπεὶ Ῥώμης ἀνατεθήσεται, | ὁ δὲ ἕτερος ὃν τρόπον ὑμεῖς ἀξιούτε πομπεύσει ταῖς ἐπονύμiais | ἡμέραις παρ' ὑμῶν συνπομπενέτω δὲ αὐτῷ καὶ δίφρος | ᾧ βούλεσθαι κόσμῳ ἡσκημένος¹. It is evident that the Alexandrians had made two gold statues, one of the Pax Augusta Claudiana, the other not specified by Claudius in his letter, and had asked through Balbillus for the emperor's permission to put up the first statue in Alexandria, probably in a public place of which the name is not given, while the second was doubtless to be kept in one of the public buildings and carried on "imperial" days in the gorgeous religious processions on a δίφρος richly adorned. The emperor agrees to the second petition, and declines the first, although Balbillus his friend, who suggested the idea, insisted upon it.

What was the precise decision of Claudius as regards the statue of the Pax Augusta Claudiana? Bell suggests that the statue was ordered by the emperor to be dedicated (in Alexandria) as a statue of the goddess Roma. In a private letter written months ago to the brilliant editor of the papyrus I produced some arguments which made it impossible for me to accept this interpretation, and suggested the idea that the statue was ordered by Claudius to be dedicated at Rome. I see now that almost the same arguments against Bell's interpretation and the same suggestion were given by U. Wilcken in the last issue of the *Archiv*². I need not repeat these arguments here, but should like to add one. It was not possible to transform (by change of attributes?) a statue of Pax into a statue of Roma. The two types, as established in Roman art, were so utterly different that it would have been necessary to make a new statue, and not dedicate the old one under the name of the goddess Roma³.

Some points, however, still remain obscure. Why was a change of place so essential to Claudius? Why was the statue when dedicated at Alexandria, in a provincial city, φορτικώτερος, but unobjectionable in the capital, at Rome? If it was the desire not to compete with the Pax Augusta of Augustus and not to assume the features of a peace-bringer after Augustus (the only reason which I can imagine if the difficulty was connected with the statue and not with the place), why should a dedication at Rome change all this? To my mind this dedication at Rome would have made the difficulties still graver and the competition still more evident. Thus we must assume that the φορτικώτερον of the act

¹ H. I. BELL, *Jews and Christians in Egypt*, 1924, 24.

² U. WILCKEN in *Archiv*, VII (1924), 308 ff. Decisive is Wilcken's reference to the Greek translation of Mon. Anc. where the Latin *Romae* is twice translated by ἐπὶ Ῥώμῃ.

³ [I unreservedly accept the explanation suggested by the two eminent scholars; see *Journal*, XI, 95². H. I. B.]





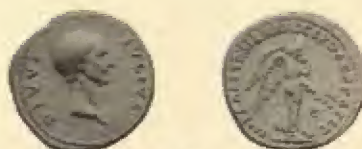
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1-6. Coins of Claudius, Vespasian, Trajan and Hadrian with the Pax-Nemesis.

7. Alexandrian statuette of Nemesis of the Dattari Collection.

8. Alexandrian coin of Trajan.

depended on the place, on Alexandria, on the connection of Alexandria with the statue. On this connection Balbillus insisted, and it is this connection which Claudius rejected. He did not object to the idea that the other statue (his own as I suppose, Messalina's as Milne suggested) should be gorgeously carried in religious processions. But he objected to the modest and inoffensive Pax adorning one of the public places or buildings of Alexandria. Why?

Is it a pure coincidence that in the same year in which the letter was written there appears on the coins of Claudius the statue of Pax Augusta? And a peculiar statue it is (Pl. X, Figs. 1 and 2). Not the traditional Pax of the republican and imperial coins with the caduceus and other peaceful attributes, but a Pax-Nemesis, unknown to Augustus and to his immediate successors, and reappearing later, but sporadically, on the coins of the Roman emperors. Let me describe the statue of the Claudian coins (I repeat the excellent description of Mattingly). "Female figure (Nemesis) winged, draped, advancing r., holding in the l. hand a winged caduceus pointed downwards at a snake gliding r. before her; her r. arm is bent upwards and with r. hand she pulls out a fold of her robe below the neck. PACI AUGUSTAE l. up, r. down!"

Now, the type of this peculiar Pax, who unites in her figure the attributes of Nemesis, Eirene, Nike, is not new. The same figure was the so-called restoration connected with Julius Caesar on coins struck in his memory by the Emperor Trajan (Pl. X, Fig. 4). The figure is exactly the same. The snake is the royal snake, the uraeus, thus reminding us of Egypt and Alexandria¹. And this connection is not illusory. Eckhel in his excellent comments on the Nemesis-coins of Claudius² quoted the well-known text of Appian, where this writer describes the end of Pompey (APP., *Bell. Civ.*, II, 90): τὴν κεφαλὴν τοῦ Πομπηίου προσέταξε ταφῆναι, καὶ τι αὐτῇ τέμενος βραχὺ πρὸ τῆς πόλεως περιτεθὲν Νεμέσεως τέμενος ἐκαλεῖτο· ὅπερ ἐπ' ἐμοῦ κατὰ Ῥωμαίων αὐτοκράτορα Τραϊανόν, ἐξολλύντα τὸ ἐν Αἰγύπτῳ Ἰουδαίων γένος, ὑπὸ τῶν Ἰουδαίων ἐς τὰς τοῦ πολέμου χρείας κατηρεῖφθη. It is evident, as Eckhel pointed out, that Caesar dedicated a statue of Nemesis-Pax near the grave of Pompey, that he thus transformed this τέμενος into a Nemeseion and commemorated the event on his coins by reproducing on them the statue of the τέμενος. Caesar's idea is easy to understand. The ὑβριστὴς Pompey who began the civil war was crushed because of his ὑβρις by Nemesis, and by this act war was transformed into peace and Nemesis became the protecting goddess of peace, the Nemesis-Pax. The snake is the genius loci, the Ἀγαθοδαίμων of Alexandria and Egypt, and at the same time the royal snake, the uraeus³.

¹ H. MATTINGLY, *Coins of the Roman Empire in the British Museum*, I. Augustus to Vitellius (1923), 165 ff., Nos. 6 f., 26 f., 51 ff., 58 f., 61 ff., 68 f., 108; Pl. 31, 5 and 17, 18; Pl. 32, 7, 8, 13, 14, 16, 17, 20, 21; Pl. 33, 18; cf. Intr., p. cllii. H. POSNANSKY, *Nemesis und Adrasteia*, 1890 (*Bresl. Phil. Abh.*, v, 2), 105 (cf. p. 172), thinks that the figure is a regular Pax and has nothing to do with Nemesis, the gesture typical for Nemesis being apotropaic. The snake is a rare attribute of Nemesis; see the two bas-reliefs of Gortyna and of the Piraeus, PERDRIZET in *B. C. H.*, 22 (1898), Pla. XVI and XV; DELAMARRE, *Rev. de phil.*, 1894, 226. The serpent to my mind connects Nemesis with the gods of the netherworld. On other monuments (coins and engraved stones) the appearance of the snake is explained by a syncretism of Nemesis and Hygieia or Nemesis and Demeter; O. ROSEBACH in ROSCHER'S *Lexicon*, III, 164.

² COHEN, I, No. 55 (p. 19).

³ ECKHEL, *D. N.*, VI, 236 ff., esp. p. 236.

⁴ On the location of this sanctuary near the Jewish quarter see P. PERDRIZET in *B. C. H.*, 36 (1912), 256 f.; cf. LUMBRICO, *L'Egitto*, 2nd ed., 226. We have of course no coins of Julius Caesar himself which would commemorate this event and reproduce the statue, as H. Mattingly has pointed out in a private letter to me. However there is an aureus of Vibius Varus (B.C. 73 (?), GRUEBER, *B.M.C.*, Republic I, 590, no. 7299, which was well known to Eckhel) with a figure of Nemesis similar to the Nemesis of Claudius

The Nemesis-Pax of Caesar was not a very popular figure in imperial art. Nemesis was one of the most worshipped goddesses of the Roman Empire. She had many sanctuaries all over the world, including both Alexandria and Egypt¹. Her figure was well known to everybody in the Hellenistic and Roman world. Everywhere, however, she is represented in her own way with attributes which do not appear in the Julian statue (wheel, griffin, *πῆχυς* etc.)². When therefore the Julian figure reappears on the imperial coins, it must be for some special reason. We leave Claudius aside for a while. Next after Claudius Vespasian used the type at the beginning of his reign (in 71 and later in 74 A.D.) (Pl. X, Fig. 3). We can easily see his motives. Was he not the victor in a civil war? Had he not crushed his rivals and restored Pax like Caesar? And was not Alexandria the first city to recognize him as the emperor of Rome?

The next was Trajan. His relations to Nemesis in Alexandria are more complicated. Eckhel explained the restoration of the Nemesis-aureus of Caesar by the words of Appian quoted above. The Jews had destroyed the sanctuary of Nemesis, and Trajan restored it with the statue, a symbol of his victory over the rebels, the *ὑβρισταί*, who had originated a terrible civil war. Eckhel may be right, if we assume that Trajan had time and leisure in his last years to think of it. However, another explanation might be suggested. The year 109–110 (the 13th of Trajan) was a peculiar year for Alexandria. Besides the usual types of the coinage of Alexandria which celebrated the victories of the emperor, the Greek and local gods of Alexandria, and the fertility of the land, we meet for the first time some new types: Eirene and Homonoia with the inscription ΕΙΡΗΝΗ ΚΑΙ ΟΜΟΝΟΙΑ, and along with it another with the figures of Euthenia and Eirene, and the corresponding inscription ΕΤΘΗΝΙΑ ΚΑΙ ΕΙΡΗΝΗ. In the same year, for the first time in the history of the imperial coinage at Alexandria, appears the type of Nemesis: Nemesis winged, running r.; short tunic, boots; l. hand on a wheel; under her r. foot a prostrate man³ (Pl. X,

which must in some way or other be connected with the murder of Caesar, and on the other hand the restoration of Trajan hardly would have repeated the Claudian type were not the type somehow connected with Caesar.

¹ The evidence is collected in the note to *B. G. U.*, VI, 1216 (110 B.C.), a document which mentions (ll. 49 and 161) a sanctuary of the two Nemeseis and Adrasteiae (of Smyrna). On the Isis-Nemesis of Delos see P. ROUSSEL, *Les cultes égyptiens à Délos*, 1916, 159 ff. A sanctuary in the Marmarica, Ptol. IV, 5, 31; Tab. Pent.; An. Rav. 3, 2; 5, 7. On the archaeological and numismatic evidence, P. PERDRIZET, *B. C. H.*, 36 (1912), 256 ff. A *Νεμεσιον* at Alexandria is mentioned in the inscription in E. BRECCIA, *Inscriptioni gr. e lat. (Cat. Gén. d. Ant. du Mus. d'Alex.)*, No. 152. I do not think that this Nemeseion is identical with that of Julius Caesar. The statues of a temple of the two Nemeseis of Smyrna and of the Milesian Apollo are reproduced on Alexandrian coins of Antoninus Pius, *Cat. Br. Mus.*, Alexandria, p. 120, Pl. III, Nos. 1028, 1031; J. VOGT, *Die Alexandrinischen Münzen*, 1924, 70.

² The best general article on Nemesis is that of O. ROSSBACH in ROSCHER's *Lexicon*, III, 117 ff. Comp. the excellent articles of P. PERDRIZET in *B. C. H.*, 22 (1898), 599 ff.; 36 (1912), 248 ff.; 38 (1914), 89 ff.; *Bronzes grecs d'Égypte de la coll. Fouquet* (1911), 38, No. 62, Pl. XVIII; *Les terres cuites grecques de l'Égypte de la coll. Fouquet* (1921), xxvi and 195; cf. 89. The winged Nemesis reminds one of the winged (*πτερόπους*, v. 1, cf. v. 6) Fortune as she appears in the well-known hymn to Fortune of the third century A.D., *Berl. Klass. Texte*, v, 2, 172; I. U. POWELL, *Analecta Alexandrina* (1925), Lyr. adespota, no. 37, 196, where Fortune is identified with Clotho, Ananke and Iria, cult of Nemesis in the early Hellenistic period *Cerc. fr. 4* (I. U. POWELL, *Anal. Alex.*, 205).

³ COHEN, I, 389, No. 283 (71 A.D.); No. 282 (74 A.D.). H. Mattingly in a private letter dates the coins in 71 and 72 (mint of Lugdunum).

⁴ On the coins of Alexandria of this year see Jos. VOGT, *Die Alexandrinischen Münzen* (1924), I, 78 ff. and II, 30 ff.; id., *Römische Politik in Ägypten*, 1924, 25 ff.

Fig. 8). The type in itself is not very common. The more interesting is it to note that it recurs in almost all details on two statuettes, both found in Egypt, one formerly in the Dattari Collection, the other in the Cairo Museum. One of these statuettes (Dattari) certainly belongs to the time of Trajan, as is shown by the coiffure of the goddess, the well-known coiffure of Sabina (Pl. X, Fig. 7). I do not doubt that the second belongs to the same time¹.

What is the explanation of this set of new types, which were repeated from this year on, the two first frequently (except for the last years of Trajan), the last (Nemesis) in the year 15? Some years ago W. Weber, in dealing with the so-called Acts of Martyrs of the time of Trajan found at Oxyrhynchus, pointed out that the events recorded in this pamphlet must be connected with the disturbances at Alexandria which are reproachfully mentioned in the vehement speech which Dio Chrysostomus delivered in that city at the time². The Alexandrian riot was serious enough to induce Trajan to send Dio to Alexandria, certainly as his special envoy, with the commission to announce to the Alexandrians the emperor's imminent visit³. The above-mentioned Acts of Martyrs of the time of Trajan show that the riot took the form of the usual Jewish pogrom, a precursor of the great Jewish revolt towards the end of Trajan's reign.

It is therefore more than probable that the Alexandrian coinage of 109-110 refers to the same events. The riot was quelled, peace and concord were re-established, and, as the result of peace, abundance, which had probably been disturbed by the grave riots of the preceding year or years. The statue of Nemesis was dedicated by the emperor to point out the triumph of Justice over the *ὑβρισται*—the rioters, who are trampled under-foot by the winged goddess. We may suppose that the restoration of the aureus of Caesar at Rome had the same significance and refers to the same events. I would, however, not stress this point. The Jewish revolt, in which the Jews destroyed the sanctuary and the statue of Nemesis, an act possibly dictated to the Jews not by military considerations only, may have led to the rebuilding of the statue and of the sanctuary by Trajan in sign of his victory—Nemesis for the second time striking the rebels.

For the last time Nemesis—this time Nemesis-Victory—reappears on the coins of Hadrian (Pl. X, Figs. 5, 6). Here again we may suppose that by this means Hadrian commemorated his victory over the Jewish rebels in Egypt and Alexandria⁴.

Let us now go back to the Nemesis-Pax of Claudius. Is it not natural to suppose that similar considerations led Balbillus and the Alexandrians to dedicate a statue of Nemesis at the time of Claudius' accession? It is well known that the Graeco-Jewish feud under Caligula was soon followed by another outbreak of disturbances at Alexandria, shortly after the death of Caligula, just at the time of the accession of Claudius. The revolt was quelled by force of arms⁵. Both sides sent embassies to Rome, as we know from the Claudian Acts of Martyrs, but the aggressors had certainly been the Jews, and it was against them that

¹ P. PERDRIZET, *B.C.H.*, 36 (1912), 250 ff. and Pls. I, II.

² W. WEBER in *Hermes*, 50 (1915), 76 ff.; Dio Chrysa. (ed. Guy de Bude) or. XXXII (*ad Alexandrinos*), 71 ff.; cf. v. ARNIM, *Leben u. Werke des Dio*, 435 ff.

³ JOS. VOGT, *Die Alex. Münzen*, 76 ff. (108-109 A.D.).

⁴ COHEN, II, No. 1454 ff. Comp. the fantastic animal on the Alexandrian coins of Hadrian, the syncretistic sphinx; on its back stands the personification of Nemesis—the griffin with the wheel; J. VOGT, *Die Alex. Münzen*, 83, Pl. I, No. XI. On Nemesis-Nike see F. CHAPOUTIER in *B.C.H.*, 48 (1924), 276 ff.

⁵ FL. JOS., *Ant. Jud.*, XIX, 278: *στασιάζεται δὲ κατὰ τὸν αὐτὸν χρόνον Ἰουδαίων τὰ πρὸς Ἑλλήνας ἐπὶ τῆς Ἀλεξανδρείας πόλεως. τελευτήσαντες γὰρ τοῦ Γαίου τὸ Ἰουδαίων ἔθνος... ἀνιθάρρησε καὶ ἐν ἑπλοῖς εἰδίως ἦν.*

the Roman soldiers had fought. What can be more reasonable than to suppose that the Alexandrians, in order to put the blame for the riot entirely on to the Jews and to celebrate "their" victory, suggested through Balbillus that a statue of Nemesis-Pax, a copy of that in the Julian Nemeseion, should be dedicated to commemorate the re-establishment of peace and the crushing of rebels, by whom no doubt they understood the Jews? Claudius, however, was well aware that such an act might originate new riots at Alexandria, and therefore calls the statue at Alexandria *φορτικώτερος*.

At Rome such a statue was indeed inoffensive, and at the same time it was a good symbol for the programme of the new reign. Let bygones be bygones; Nemesis has crushed Caligula, a new era of peace begins, no vengeance is contemplated, amnesty is announced¹. Nemesis-Pax, the same who marked the end of one *ὀβρισιότης*, shall watch over the preservation of peace under the new emperor. That is why the statue intended for anti-Jewish propaganda received a new meaning and a new significance in the skilful hands of the emperor whom we were accustomed to consider as a half-witted slave in the hands of his slaves and freedmen and of women. The clever measure of Claudius accounts also for the fact that no mention of this act is found on the Alexandrian coins. Moderation and modesty were the slogans of Claudius, a striking contrast to Nero, who accepted with satisfaction from the Alexandrians all the divine honours which Claudius so tactfully declined.

ADDENDUM.

The rôle which Ti. Claudius Balbillus (spelt Barbillus by the Graeco-Egyptian scribe) plays in the letter of Claudius and which cannot be explained unless Balbillus is identical with the well-known prefect of Egypt under Nero is now fully understandable in the light of the new inscription recently found at Ephesus and published by J. KEIL in *Forschungen in Ephesus*, III (1923), 127 ff., no. 41 and 42. Bell in his comments on the papyrus (p. 29) refuses to recognize in Barbillus the prefect of Nero, since, he says, "it is not probable that the prefect had any connection with Alexandria." This connection is now established by the inscription of Ephesus, which gives almost a full account (the beginning of the inscription however is lost) of the career of Balbillus. He began his imperial career as "praefectus fabrum" and "tribunus militum" of the XXth Legion and distinguished himself in the conquest of Britain (military decorations). As a man of literary tastes and excellent education (SEN., *Nat. Quaest.*, IV, 2, 13) he was appointed by Claudius "ad legationes et res[ponsa graeca (?)]" of the emperor. Being thus for a time in close relations with Claudius and having won apparently his warm sympathy he was promoted to be "(procurator) aedium divi Aug(usti) et [aliorum aedium e]t lucorum sacrorumque omnium quae sunt Alexan[drae et in tota Aegypt]o et supra Mú[s]eu[m] e[st] ab Alexandri]na bybliothecé] et archi[ere]i et ad Herm]en Alexan[dreon pe[r] annos...". The supplements of J. Keil are beyond any doubt as suggested by the well-known fragment of a Rainer papyrus (no. 27922): *ναὼν Σε[βαστῶ]ν ἀρχιερεῖ καὶ τοῦ μεγάλου [Σαράπιδος] καὶ τῶν κατ' Ἀλεξανδρίαν καὶ κατ' Αἴγυπτον πᾶσαν ὄντων καὶ ἄλλων καὶ τεμενῶν καὶ ἱερῶν Φλαβίῳ Μέλανι τῷ κρατίστῳ*. The mention of the number of years which Balbillus spent at Alexandria explains both his popularity with the Alexandrians (see ed. Ti. Jul. Alexandri) and his intimate knowledge of the conditions both at Alexandria and in Egypt

¹ Cf. MATTINGLY, *Coins of the Roman Empire*, I, cliii.

which account for his appointment after his procuratorship in Asia to the post of prefect of Egypt under Nero. The mention in the inscription of "luci sacri" in Egypt probably devoted to the cult of Augustus and to the cult of the Egyptian gods explains l. 42 in the papyrus "ἄλση τε κατὰ νομὸν παρῆναι τῆς Αἰγύπτου" and corroborates the reading κατὰ νομὸν and not κατὰ νόμον, which had been suggested. It is not necessary to suppose that new "luci" were consecrated to Claudius. It is more probable that in the ancient groves consecrated in every "nomos" to various gods the cult of Claudius was added to the cult of Augustus, as that of Augustus was added to the cult of Egyptian gods. On other interesting points in the inscription see the substantial comments of J. Keil. The last question is how to explain the fact that Balbillus was the President of the Embassy of 41 A.D. He certainly had not been appointed President of the Museum as early as in 41 A.D. (in 44 A.D. he was still in the military service). It seems therefore that his official career began late in his life and that he was promoted to the equestrian rank because of his literary activity, which was doubtless well known to Claudius. This literary activity was probably carried out by him at Alexandria in the Museum of which he later became the president. Though he was of royal descent (STEIN in *P.W., R.E.*, III, 2679, no. 81 and 82), nothing prevents us from assuming that he was a resident of Alexandria, an Alexandrian aristocrat, and already famous among the Alexandrians and in the Greek world when his official imperial career began. In 41, as the papyrus shows, he was already a friend of Claudius, certainly because of common literary interests, and this explains his brilliant and speedy advance under Claudius and the philhellene Nero. Like Claudius he had archaeological interests (see the well-known inscription in his honour, DITTENBERGER, *Or.*, 666), especially in Egyptian archaeology. He may have helped Claudius in some of his antiquarian works. It may be that the embassy which is mentioned in the papyrus strengthened the ties which united him to Claudius and was the starting-point of his promotion. If so, the second friend of Claudius who is mentioned in the papyrus, Archibius, who probably was resident in Rome, as he was not a member of the embassy¹, was also an Alexandrian intellectual. I would suggest identifying him with the famous surgeon of the first century A.D. (see M. WELLMANN in *P.W., R.E.*, II, 466, no. 5), perhaps one of the surgeons of the court of Claudius.

The famous Sophist Dionysius had in the times of Hadrian a career similar to that of Balbillus (PHILOSTR., *Vitae Soph.*, I, 22). Because of his literary activity he was appointed by Hadrian procurator of two provinces and made a member of the Alexandrian Museum (see the inscription in his honour in *Forsch. in Eph.*, III, 133, no. 47 and the comments of J. Keil). If his full name was really Ti. Claudius the Roman citizenship was bestowed on him or on his father by Claudius or Nero.

¹ [This is open to question. It has been suggested privately by Dr. Krüger of Leningrad and independently by H. WILLIACH in *Hermes*, LX (1925), 488 f., that the careless scribe omitted the name Ἀρχιβίου after Τιτίου Κλαυδίου in l. 19. This supposition, which removes the difficulty of the Ἀρίππου there (see my note, *ad loc.*) and raises the number of ambassadors from eleven to the likelier figure of twelve, seems to me a practical certainty. H. I. BELL.]

necessity of getting it in beneath the \triangle . But Budge read the tree-name correctly, Borchardt wrongly.

The tablet then refers to a "Book of the Sycomore and the Olive." The rest of the inscription—"The Good God, Nibmaṣat-Reṣ, given life, beloved of Ptah king of the two lands, and the King's wife Teie, living"—shews that it is the label of a book belonging to the royal library, the bookplate, so to speak, of Amenophis III and Teie. Sir E. Budge speaks of it (*ibid.*) as "originally inlaid in an alabaster tablet, which is now lost." Dr. Borchardt (*ibid.*) speaks of it as "ein früher eingelegt gewesenes Etikett eines Bücher bezw. Papyruskästchens," and finds relics of such "Papyrusfütteralen" in some alabaster plaques in the Berlin Museum (Nos. 10586-10588), "said to have been" found with the 'Amarnah tablets (first published by Winckler in *Der Thontafelfund von El Amarna*, II, Pl. III), and bearing the names of Amenophis III, which, since they have traces of fastenings and the usual Egyptian ebony buttons, he considers to be the lids of alabaster boxes to hold papyri. Erman had already described these plaques in *Zeitschr. f. äg. Spr.*, 1889, 62; giving the information (omitted by Borchardt but given by Winckler) that the inscriptions were inlaid in blue enamel (exactly as in our "bookplate"). Budge and Bezold evidently considered that our plaque, which is all of fayence with inlaid inscription in glaze or "enamel," was analogous to the blue glaze "enamel" inscriptions of the Berlin alabaster plaques, and had itself originally been inlaid in such a plaque. It may have been so, but from the fact that our plaque has in its rounded end or top two holes about $\frac{1}{2}$ inch apart, made obviously for the insertion of a double metal wire attachment, it would look as if it were intended to be inlaid in wood rather than stone, and most probably in the lid of a wooden box, as Erman thought (*ibid.*) was the case with the Berlin alabaster and fayence plaques. Whether Erman or Borchardt be right about these, I think that a wooden box is more probable in the case of our plaque. One has a good example of the combination of fayence and wood in the exactly contemporary coffers of Amenophis and Teie found in the tomb of Iuiya and Tuuyu (Newberry and Carter, *Tomb of Iouiya and Touiyou*, pp. 46, 47, Pls. XXXVIII, XXXIX). It is hardly probable that the plaque is merely a ticket, not intended to be inlaid in anything but simply to be affixed by string or wire to a vase, box, or case containing the "Book of the Sycomore and the Olive." One hardly thinks that this breakable material would have been used for this purpose.

Dr. Borchardt assumes that the label is intended for a case of papyri, and that the tale of the Sycomore and the Olive was an Egyptian work, although, as he notes, we do not possess any Egyptian copy of such a story. But its idea is Egyptian enough, and we have the rôle of the persea in the "Tale of the Two Brothers," and the talking sycomore, noted by Borchardt, in a Turin papyrus published by Maspero (reference given by Borchardt as *Études*, I, 211 ff.). It could well be Egyptian. Ranke (*ibid.*) follows Borchardt. Erman however had assumed that the wooden boxes to which he concluded the Berlin alabaster fayence-inlaid plaques must belong were intended to hold the cuneiform tablets with which they were found. This conclusion seems very reasonable, and has been followed by Niebuhr (*Die Amarnu-Zeit*, p. 4), Knudtzon (*Die el-Amarna Tafeln*, I, 11), and Opitz (*ibid.*), who all appear to regard the original books of which they and the London plaque were the labels as having been cuneiform tablets, in contradistinction from Borchardt. Dr. Opitz gives the reason for his belief in the fact that there existed in Assyrian literature a fabulous history of the wordy combats of two trees, the Date-Palm and the Tamarisk (Ebeling, *Aus den Keilschrifttexten aus Assur* ("Der Streit zweier Bäume"), *M.D.O.G.*, 58,

Aug. 1917, 32 ff.), and as he evidently thinks that it is reasonable to suppose that a label found with El-Amarnah tablets is the label of such tablets, and not of papyri, he concludes that it is equally reasonable to suppose that the book of which this is the label was this identical *Story of the Date-Palm and the Tamarisk* in its cuneiform tablet form, and that the title is translated into Egyptian on the label.

This would have seemed very reasonable had the Egyptian label referred to either of these trees; but now that we see that the palm is not mentioned at all and that the trees referred to are the sycomore (or another deciduous tree) and the olive, we can hardly assume absolute identity. Still, there may have been another version, in which a sycomore or another tree (*nht* might mean "tree" in general, as Opitz points out, not a sycomore only) and an olive took the part played by the tamarisk and the palm in the other. The comparison is very apposite.

But a question arises whether a story of this kind is originally Mesopotamian, and not more probably Egyptian. Fables and wisdom-stories are not common in cuneiform literature, nor are they found early; whereas in Egypt they seem at home from the beginning. The enumeration of its virtues and practical uses by each tree in vindication of its claim to supremacy sounds very Egyptian.

"I am altogether greater than thou, noble sir (said the palm). The husbandman, all that he has, the guiding-rope, the whips, the cover for the waggon, the cover for the oxen," and so forth, are all paraded as proof of his indispensability; to which the tamarisk retorts with a catalogue of his virtues, some of which it is to be owned are not very Egyptian, as when the king and his nobles are made to eat off a table made of his wood and from vessels also made of it. The Egyptian did not use wood much for the purpose of making eating and drinking vessels. Still, the whole atmosphere of the tale is Egyptian enough. It might conceivably be of Egyptian origin, with the names of cities and gods translated into those of Mesopotamian counterparts (Kish and Nidaba).

Whether this be so or not, such a tale is eminently one that might be discovered any day in an Egyptian papyrus, so that we cannot say that Borchardt and Ranke are wrong, and that our label was the royal bookplate not of an Egyptian novel written on papyrus but of an Assyrian one incised on clay. Only the fact of its discovery with the 'Amarnah tablets makes the latter suggestion on the whole more probable than the former, so that the tale of *The Sycomore and the Olive* may have been another version of *The Palm and the Tamarisk*, told on cuneiform tablets which were placed in a box in the royal library, of which this is the label, with the names of both Amenophis and Teie, as it might be "los Reyes" Ferdinand and Isabella.

On each of the Berlin labels are also two cartouches, but in four out of the five (the number given by Winckler and Knudtzon, which I take to be correct: Erman says there are four, and Borchardt only three) one of the cartouches is scratched out, and Erman, followed by Niebuhr, supposed that this contained the name of Akhenaten. Borchardt and Knudtzon, however, mention Amenophis III only, and that they are right is evident. The fifth tablet, which is untouched, simply bears the prenomen and nomen of Amenophis III. So did the four others, of course, but the nomen on them was scratched out in the heretic's time because it contained the name of Amūn. That is all. Akhenaten does not appear. Nor does Teie, and there is nothing besides the cartouches but the double plume above them. We do not know therefore of what books—papyri or tablets—they formed the covers. In all probability Borchardt's explanation of them is more correct than Erman's,

THE GOD PANEPI


By W. SPIEGELBERG¹


With Plate XI, Fig. 2.

The name of this god is known to us from the following inscription, attributed by the epigraphists to the sixth century, found on the pedestal of a bronze statuette of an Apis-bull discovered in the Delta²:

ΤΟΙ ΠΑΝΕΠΙ ΜΑΝΕΣΤΑΣ ΕΞ ΟΨΥΔΗΣ

τῷ Πανεπι μ' ἀνέστασε Σωκύδης

Ulrich Wilcken³, the last who has discussed this inscription, gave up the divine name Panepi as a mystery. And in fact both the explanations so far proposed are unacceptable. To derive ΠΑΝΕΠΙ from Ba-en-Ptah, "Spirit of the god Ptah," is phonetically quite impossible, and the explanation Πανῶπι, "The All-seeing," besides resting on an emendation, ill accords with the votive Apis-bull, which must surely be designated in some way or other by the name ΠΑΝΕΠΙ. This designation is, indeed, quite clearly recognizable in the second half, ΕΠΙ, of the name, in which I see a form of  H'py, Coptic *ḡane* (S.): *ḡani* (B.), with the older vocalization **ḡeni* which we can with certainty assume from the researches of Albright⁴ and the classic treatise of Sethe⁵ on vowel-change in Egyptian. In accordance with what they have laid down common-Coptic *d* was developed out of an older *t* or *ḏ*, and the Assyrian rendering Puṭubesti (or Puṭubisti) of the name later vocalized Περουβαστis⁶ proves that the older vowel-system with *t* or *ḏ* still existed in the seventh century. It is thus reasonable to assume this form for the present inscription, dating as it does from the sixth century.

But what is the first part ΠΑΝ of the name ΠΑΝΕΠΙ? I tried a number of explanations (for example the god Πᾶν, the word "all") before the following consideration of the problem brought me to a solution. If ΠΑΝΕΠΙ designates the Apis-bull whose statuette Sokydes offered, then it must be possible, as I have already insisted, to read this name or idea in the word. I therefore asked myself how Apis-bull could be translated into Egyptian, and took as a first rendering (several are conceivable)  *pṯ ḥ n(l) H'py*, or, in the various dialects of Coptic, *neḡeṇḡane* (S.): *neḡeṇḡani* (B.): *naḡu ṇ*ḡani* (F.): **naḡe ṇḡene* (A.). If we assume for the sixth century the vocalization **ḡeni*

¹ [In order to conform to the custom of the *Journal* Professor Spiegelberg has very kindly consented to allow me to translate his article into English, though well aware that owing to the peculiar nature of the subject certain of his comparisons must lose point by not being in the original German. My task has been rendered very difficult in places by the fact that German has preserved more completely than English the Teutonic pastoral vocabulary. Thus it is impossible in English to find a word for Rind, the singular, whether masculine or feminine, of our plural word "cattle." In order to make the author's point quite clear I have in critical cases added the German word in brackets. Editor.]

² "From a Greek site in the Delta of Egypt." (A. S. MURRAY in *Arch. Anzeiger*, 1899, 205.)

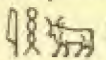

³ *U.P.Z.I.*, 25, and references there given.

⁴ *Zeitschr. d. Deutsch. Morgenl. Gesellschaft.*, LXXVII, 1925, 171.

⁵ *Rec. Trav.*, XI, 1923, 66.

⁶ *Ibid.*, 173.

demanding above, which would agree with the Akhmimic form¹ here reconstructed, we should then get for Apis-bull *Pēhē-n-Hēpe* or *Pāhē-n-Hēpe*.

The Coptic *ερε* (S. B.) <  is perhaps a nominal formation like *cke* "door" < *sbi*, *pne* "temple" < *ri-pr*, *εμε* "gardener" < *kmi*², and therefore to be derived from *ē'hēy*, the *y* having dropped after the accented vowel³. The helping-vowel before the double consonant may be either *e* or *a* according as the  has the value of yod or aleph. Thus side by side with *εμπτ* < *emēntey* "the west" we find *δμντε* < *d'mentet* "the underworld". In the case of *ερε* one of the dialects, the Middle Egyptian, actually has in *δρη* an *δ* instead of *ε*, and it is possible that the Akhmimic form, which has not yet been discovered, was **δρε*⁴. That a form *δρε* existed side by side with *ερε* is proved by, above all, the Greek form of the personal name *Pt-šri-(n)-tī-'ht*, "The son of the cow", *Πενταης*, *Ψινταης* and variants⁵, alongside with *Πεντεης*, or, in the feminine, *Pt-šrit-n-tī-'ht*, "The daughter of the cow" = *Σεντεης*, **Σενταης*. In this personal name *tī-'ht*, "the Cow," doubtless denoted a sacred cow, either the cow of Hathor⁶ or possibly the Apis-mother. We may therefore, in explaining the name *πανεπι*, take the masculine *'h* to denote the sacred ox. Thus in Greek nothing is left of *a'hē* save the *a*, as is the case in other Greek renderings of Egyptian names, e.g. *Πελαιας* from *Pt-mr-'h* (**mlaδρε*), "the overseer of cattle", or again *Πενανεις* from *Pt-šri-(n)-hr-'ht* (**mnεnδρεn*)⁷, "the son of the cow-head," i.e. "the son of Hathor".

Thus the derivation of *πανεπι* from *Pt-'h-n(i)-H'py* is quite unobjectionable. Since the Greeks did not indicate the aspirate *h* in writing they wrote **Παεεπι*. The falling of the *ε* next gave *Πανεπι*, just as *Πετοσιρις* was derived from *Πετοσιρις* and *Παμμοννις* from *Παμμοννις*, the first step in the process perhaps being the assimilation of the *ε* to the *a*. In this case the phonetic development may be represented as follows: **παιεπενι* > **παιεπενι* > *πανεπι*⁸.

¹ In this case, too, "this dialect" again shows itself to be very archaic.

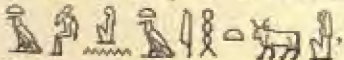
² STEINDORFF, *Kopt. Gram.*, § 106.



³ SETHE, *Verbum*, I, § 98, and for the nominal formation in *y*, STEINDORFF, *Kopt. Gram.*, § 120 ff.

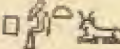
⁴ SETHE, *Nachr. Ges. Wiss. Göttingen*, 1922, 209.

⁵ The feminine *δρη* is found in Fayyumic, and also in the Fayyumic-Sahidic mixed dialect, *Bull. Inst.*, XIV, 116-8; xv, 254-5. It is formed from *e'hēyet* and shows the same formative vowel *i* as the feminine form of *mty*, *μοσι*, "lion," viz. *μιη*, "lioness," derived from *emēyet*.

⁶ See SPIEGELBERG, *Demotische Studien*, II, 10. The name is often found in the late period with endless variants, and is often incorrectly read. A rare full writing of the feminine proper name is

 *Pt-šri-t-n-tī-'ht* (DEVÉRIA, *Catalogue Pap. Louvre*, 55). Other writings of

the masculine name are  (Rec. Trav., VI, 121),  (Ann. Serv., XX, 52) and

 (LIEBLEIN, 1032, 1263 b and Ann. Serv., XXIII, 230), *Pt-šri-(n)-tī-'h-t*.

⁷ See PREISIGKE, *Namenbuch*, 489.

⁸ Whether it be the Hathor of Aphroditopolis (see *Archiv für Papyrusforschung*, VII, 183) or that of Dér el-Bahri (GRIFFITH, *Rylands Pap.*, III, 122, n. 6).





⁹ *Rylands Pap.*, III, 195.

¹⁰ *Pap. demot. Berlin*, 3116, VI, 16.

¹¹ This rendering is thus based on the feminine **ερη*. Different again is the vocalization in the name of the town of Aphroditopolis, *τηρη*, *Θρη* < *Tpl-'h-x* and *πετρηε*, *πετρηε* < *Pr-tpl-'h*. On this see *Archiv für Papyrusforschung*, VII, 183.

¹² The later form of this name is perhaps to be seen in the late proper name *Πανανις* (second century A.D., PREISIGKE, *Namenbuch*). With the personal name "The Apis-ox" compare such names as *Πανίρις*, "The dog of the god Horus."

The meaning of the name can also be justified, for it answers exactly to the sense required, since it does in fact mean the "Apis-bull," as was to be expected from the content of the votive inscription. To be quite accurate, however, we should translate not "Apis-bull" (Apis-Stier), since *kʿ* is the word for "bull" (Stier), but rather "Ox of Apis" (Rind des Apis). This literal rendering at once gives one the impression that we have here to do with a popular designation something like Apis-ox ("Apis-Rind oder Apis-Ochs").

In this combination I take the genitive to be a so-called *Genitivus appositivus*² as in *arbor fici, urbs Romae, Τροίης προλιέθρον*, ville de Paris, which last is actually to be found in ancient Egyptian in combinations such as *dmꜣ n Gbtyw*³, "the town of Koptos." In the popular speech the Rind (ox) Apis may have been distinguished from the Nile-god   *Hꜣpy*, whose name had a similar sound, or from the protective deity   of the dead in somewhat the same way in which the German people strive to distinguish "Vogel-Strauss" from "Blumen-Strauss".

Adopting this explanation of the name as "Apis-ox" (Apis-Rind) we get in the form **ꜣeni*=*eni* an important chronological corollary for the above-mentioned vowel-change from *i:ē* to *d*. Since Herodotus in the middle of the fifth century heard the form *Ἀπῖς* with an *a* and since our inscription from the sixth century vouches for *eni* with *e*, this change of vowel must have taken place somewhere between 600 and 450 B.C.⁴ This agrees admirably with the fact that the Assyrian rendering of Petubastis by Puṭubesti (Puṭubisti) (see above) shows the vowel *i:ē* to have been still in use in the seventh century.

If I am right in taking the name to be a popular one for the Apis-bull we should hardly expect to meet with it in official texts such, for example, as hieroglyphic inscriptions in temples, and it is therefore not surprising that, as Professor H. Grapow kindly informs me, it is not to be found in the collections of the Berlin Dictionary.

It was to this popular Egyptian Apis-god, then, that Sokydes dedicated his Apis-statulette. I do not venture to decide whether we should be justified in arguing from a single object to the existence of a Greek Apis-cult in Egypt as early as the sixth century B.C. It is surely quite conceivable that the Greek should dedicate his offering to the foreign god in whose proximity he was for the time living.

¹ I.e. "Ochs" in the general meaning of "Rind." [The lack in English of a word for the German Rind, the singular, common gender, of our plural "cattle," makes translation difficult both here and later. (Translator.)]






² Cf. KÜHNER-STEGEMANN², *Ausf. Gram. d. latein. Sprache*, II, Satzlehre, 418, § 83^b; KÜHNER-GUTH², *Ausf. griech. Gram.*, 1898, § 402.

³ ERMAN, *Aegypt. Gram.*, 3rd ed., § 218. Cf. *dmꜣ n Bt-kr*, "the town of B." (*Revue Ég. Ant.*, I, 21) and other instances *ibid.* (Sethos I).

⁴ Such explanatory or distinguishing additions in names of animals are common in many languages, as Herr Franz Marschall informs me. In addition to *autruche* < *avis struthio* (and so exactly parallel to the "Vogel-Strauss" quoted above) he has given me the following good examples: *Renn-Tier*, *Elen-Tier*, *Maul-Tier* (< *mulus*) in the first two examples of which *Tier* has the meaning of "deer" *Rotwild* (fallow-deer). Also *Turtel-Taube* (< *turtur*), *Dam-Hirsch* or *Dam-Bock* (< *dama*) and *Windhund*, which has nothing to do with the wind but is derived from the Middle High German *wint* to which *Hund* has been added as an explanatory affix. In any case in all these examples the second word is in apposition to the first.

⁵ This vocalization facilitates phonetically the comparison of Apis—*eni* with the *Ἐπαφος* of Herodotus, II, 153. May not the combination *Epaphos* have arisen at a time when the two forms **ꜣeni* and **ꜣani* were to be heard side by side?

ADDENDUM.

Objection may be taken to the above derivation of **epē** from *'hy* (*š'hēy*) on the ground that the final *y* assumed by my theory is never written out as  or , which is remarkable, coming as it does after the accented vowel. This omission indeed rather suggests that the last syllable was unaccented, and there is therefore much to be said for Herr Marschall's proposal to derive **epē** from *'hyw* (*š'hyēw*), with which the Late Egyptian writing   , *'hw*—if the *e* be not regarded as valueless—would well agree. The falling away of final *-yēw*, leaving only the *š*, would find a close parallel in **merate** < *merydyēw* and **setate** < *šwddyēw* (SETHE, *Verbum*, I, § 94b, § 161b). Similarly the feminine **apē** "cow" (< *š'hēyet*: compare **min** "lioness" side by side with **my**, **mot** "lion") and the plural **epoot** (S.): **epoot** (B.) (< *š'hyēwēw*: compare **ecoot**: **ecoot** "sheep," i.e. plural *šrōyēwēw* > *š'ōyēwēw* from *sryw* (?) > *s'yw*) "oxen," may on sound phonetic lines be derived from *'hyw*. At the same time this uncertainty on a phonetic point detracts in no way from the certainty of my explanation of **panēni** as "Apis-bull."

ORCHARD AND VINEYARD TAXES IN THE ZENON PAPYRI

By W. L. WESTERMANN

Three brief letters of the Zenon correspondence have come to Columbia University which are all of a standard size and of similar shape, as letters, after having been written and folded for sending. The original size of the sheets was $3\frac{1}{4}$ inches horizontal by 13 or $13\frac{1}{2}$ inches vertical measurement. This type of letter paper would, therefore, despite its unusual length horizontally, correspond to the "half-sheet" or "memorandum size" of our business world. The contents also of these Columbia letters would indicate that this size was in use in Zenon's circle for business notes. After being written the three letters were, in each case, folded in exactly the same way, thrice lengthwise (*i.e.* horizontally), then once through the middle, vertically, reducing the length of the letter, as folded, by one half. The address upon the verso is in all cases in a corresponding position. As no one of the letters is completely preserved, the determination of the standard form has been of some importance in the matter of attempted restorations. One of the letters, P. Col. Inv. 13, is almost perfectly preserved upon the left side. It shows an unwritten margin of somewhat more than an inch. I have thought it reasonable to assume such a margin for all three of the letters and at both ends of the writing on the recto.

Of these three letters it seems advisable to publish the following note to Zenon, if only to call forth corrections or suggestions upon the interpretation here offered before the letter is incorporated in some permanent collection of the correspondence and business records of Zenon.

Two full inches of the original memorandum sheet are lost upon the left end of the papyrus, and the last two inches upon the right end are so badly shredded that only a single letter is legible. The writing is across the fibres, in a small and beautiful hand which is unusually clear and easy to read. Unfortunately two of the lengthwise folds run directly through lines 1 and 3 respectively, making the reading difficult, through no fault of the writer.

Letter to Zenon on exemption of an orchard from the tax of one-sixth.

P. Col. Inv. No. 12. $3\frac{1}{4} \times 11$ inches. 256 B.C.

Ζήνωνι χ[αίρειν]. ἐξεθήκαμεν ἔχθεμα ἐν τῇ ἀγορᾷ τοῦ Φαμενώθ ιβ.. [c. 11 letters
τοῦ αὐτοῦ] ἢ μὴνός τῇ λ τὸν καρπὸν τῶν ἐν τῷ κήπῳ ἀκροδρύων πάντα πλὴν τῶν [φοινίκ]ω[ν
c. 11 letters]ν τοὺς βουλομ[έ]νους ὠνεῖσθαι κα[ὶ] ἡῦρηκεν ἀτελεῖς κ[α]ί.....ταφ[c. 16 letters
ἐγράψαμε]ν ο[ὗ]ν καὶ Ἀπολλωνίῳ ἔρρωσο. (ἔτους) κθ Φαρμούθι κε

Verso (2nd h.)] . . .

] . ην

(1st h.) Ζήνωνι.

"..... to Zenon greeting. We published a notice in the market place on the 12th of Phamenoth that on the 30th of the same month (we would sell the right to collect the tax upon) the entire produce of the trees in the garden except the produce of the date palms." Some sort of discussion occurred with the bidders, "and the decision was reached that the produce was exempt and..... We have therefore written also to Apollonius."

Verso (last letters of the docket). "To Zenon."

Notes.

1. The name of Zoilus, who was the *oeconomus* of the Arsinoite nome in the year 29 (P. Cair. Edgar 16 introd., 18; P.S.I. 498, 509), cannot be inserted here as that of the writer of the letter, although this business of the sale of the *apomoira* was a matter within the jurisdiction of that official. More probably the writer was one of the local officials under the chief *oeconomus* of the nome. They also bore the title of *oeconomus*. See WILCKEN, *Grundzüge und Chrestomathie der Papyrskunde*, I, 1, 151.

There is not sufficient room for the restoration of two names of officials, as would seem to be required by the plural verb *ἐξεθήκαμεν*.

ἐξεθήκαμεν ἔχθεμα. MAYSER, *Grammatik*, 228. Cf. P. Petr. III, 125, 8-9 *ἔχθεμα [ἐ]χθεῖναι*, and *τὸ πρῶτον ἔκθεμα* in P. Rev. 26, 13, in regard to the auction of the sixth on vineyards and orchards.

2. The 30th of Phamenoth fell upon May 23rd in 256 B.C. This is the period of the ripening of most of the fruits in Egypt. See M. SCHNEBEL, *Die Landwirtschaft im hellenistischen Aegypten* (Munich, 1925), p. 314 for apples, p. 301 for figs. The date harvest, however, did not come until the period August to November (*op. cit.*, 298), and cf. ERNST KÜHN in *B.G.U.* VI, 98. For that reason I have restored *φοινίκε]ω[ν*. This fills the space as far as the *ω*, which is legible.

ἀκροδρῦα is a general term for fruit-trees. Cf. KÜHN in *B.G.U.* VI, 1304-1311, who is incorrect in referring to it as "fruit land." The separation in our letter of the date palms from the remaining fruit trees shows that, however paid, it is a production tax, not a tax on the land.

3. *τοὺς βουλομ[έ]νους ἀνείσθαι* cannot, in consideration of the sense here required by *ἤρρηκεν ἀτελεῖς*, refer to the consumers as in P. Rev. 40, 18, *τοῖς [βου]λομένοις ἀνείσθαι*. I understand it to mean the bidders for the right to farm the tax. This is supported by the *[οἱ] δὲ μὴ ἀνε[ί]σθωσαν* of P. Rev. 15, 2.

4. *ἤρρηκεν*. Used in an impersonal sense—"the finding was"—similar to *ἐκτιθέτωσαν τὸ εὔρισκον* in P. Rev. 48, 15-16, where the *oeconomus* and *antigrapheus* are to write out and publish "the finding," or "the result" (*τὸ εὔρισκον*), each day.

ἤρρηκεν ἀτελεῖς, that is, *ἤρρηκεν ἀτελεῖς ὄντας τοὺς καρπούς*.

Discussion.

The content of this letter has to do with the auction of the right to collect a tax on orchards. This tax is apparently the sacred tax of a sixth, the *apomoira*. This conclusion rests upon the fact that the trees here mentioned were exempt (*ἀτελεῖς*) from a tax the collection of which was farmed. This was not the case, I think, with the regular ground tax on orchards and vineyards called the *ἐπαρούριον*¹. There was another assessment applied

¹ P. Hib. 112, 13 and note; P. Cair. Edgar 38. The fact that the *eparourion* appears in receipts from the state banks (WILCKEN, *Gr. Ostraka*, no. 352; *B.G.U.* VI, 1337; VIERECK, *Gr. Ostraka*, no. 22) along with the *apomoira* is to be explained on the ground that the peasants paid in the *eparourion* directly and the bank gave to the peasants a total receipt for taxes on vines and orchards, including what the peasants paid in and what the tax farmers also paid in for them on this account.

to vineyards called *ἐπιγραφή*, for which also the system of tax farming was employed¹; but in support of the conclusion that this letter deals with the *apomoirā*, we find here a marked similarity of phraseology with that which occurs in the Revenue Laws of Philadelphus. Note the *ἐξεθήκαμεν ἔχθεμα* here, and compare *ἐχθεμα ποιήσειν* in the Revenue Papyrus (see Index). More noticeable is the peculiar use of *ἡύρηκεν* in this letter in an impersonal sense closely analogous to the use of *τὸ εὑρίσκειν* in Revenue Papyrus 48, 16, as explained in note 4 above.

The letter is addressed to Zenon. It is dated in the 29th year of Philadelphus. In this year Zenon was still a sort of general manager of the affairs of Apollonius². Unfortunately we do not know the exact time at which occurred his transfer to the Philadelphian estate as his particular and sole sphere of activity³. Therefore the "garden" here referred to may be either the one on the Memphite or the one on the Philadelphian estate of Apollonius.

It was the *oeconomus*, assisted by the *antigrapheus*, who had charge of the auctioning of the tax-collection of the sacred sixth, of the oversight of the collection thereof by the successful bidder, and the balancing of accounts between the tax farmers and the government. The balancing of the accounts for each month took place before the 10th of the following month (P. Rev. 16, 1-6). Throughout the Revenue Laws, ten day periods and thirty day periods appear as characteristic of the close relations which existed between the *oeconomus* and the tax farmers. For example, after the close of the period of any contract between government and tax farmers, the tax farmers were compelled to appear before the *oeconomus* for the closing of their accounts before the tenth day of the following month. Within thirty days after the purchase of the tax collection privilege, the successful tax farmers were compelled to name their bondsmen (P. Rev. 34, 2-4). In view of these ten and thirty day periods it is not surprising that in this case the auction of the right to collect the tax on the particular garden in which Zenon was interested should be fixed by the *oeconomus* for the 30th of Phamenoth. The last day of the month would be the natural date for the auction of the tax-collecting concession⁴.

In the broken letter which I have transliterated above an *oeconomus* had offered for sale the right to collect the tax on a garden belonging to Apollonius, the auction being concluded on Phamenoth 30th. Later a decision had been reached with the successful bidders of this tax farm that the produce of the trees in that garden were exempt from tax, and our letter brings assurance of that fact to Zenon and Apollonius. There is no reference in the letter to any protest by Zenon in behalf of Apollonius regarding the procedure of the *oeconomus* in offering for sale the right to collect on this garden. Therefore that act of the *oeconomus* was probably expected and in accordance with the known regulations. This observation coincides with the information given in the Revenue Laws of Ptolemy Philadelphus, that *all* orchards and vineyards in each *nome* were registered annually for the payment of the *apomoirā*. The royal scribes attended to the registration of those orchards and vineyards which were cultivated by the peasants, making a separate list of vineyards and orchards belonging to the temples, which were exempted from the operation of this tax. Cleruchs who had vineyards or orchards, and all others who owned

¹ P. Cair. Edgar 38. Cf. P. Teb. 1, 39 f.

² Rostovtzeff, *A Large Estate in Egypt*, Madison, 1922, 39.

³ See the discussion in note 1 above to the text.

⁴ This was pointed out to me by Professor Rostovtzeff, who gave me other valuable hints regarding this letter.

them or possessed them within gift estates or held them under any other arrangement, made their own declarations and were required to pay the sixth (P. Rev. 36, 3-19).

From the provision of the Revenue Laws just cited it becomes clear that the fruit produce from any estate of Apollonius, gift estate or otherwise, must have been declared for taxation. It is also clear in the Revenue Laws that exemptions were sometimes accorded on parts of vineyards and orchards, though the conditions under which such exemptions occurred are not explained. A lacuna of seven lines occurs just at the point where penalties are imposed upon cultivators of vineyards and orchards who shall have confused "taxable produce with exempted produce". Under what arrangement, then, could the fruit trees of Apollonius be exempted from the operation of this tax? To this question I offer the explanation that this orchard of Apollonius was a newly planted one and that the exemption accorded to his fruit trees arose automatically out of this fact, because the tax on fruit trees was a tax on production and not a tax on the orchard as land or by the number of trees.

It was in the years 257, 256 and 255 B.C., particularly, that Apollonius was busied with the planting of his olive groves, vines, fig trees, pomegranates, and apple trees, upon the estate in the Fayyûm². He obtained his cuttings chiefly from the large garden on his Memphis estate³. The "garden" of the Fayyûm estate of Apollonius was, therefore, clearly a newly planted one. That of the Memphite estate might have been older. It is for this reason that I am inclined to refer the contents of this letter to the trees upon the estate at Philadelphia rather than to those at Memphis.

The age at which fruit trees come to full bearing maturity varies greatly according to the kinds of fruit. Even in the case of fruits of one kind it still varies considerably according to the variety, and somewhat according to climate and region. In the north-western states of the United States apple orchards come to profitable bearing at six years and bear full crops at ten years of age. In our eastern states the time required for apple trees to attain full bearing is from three to eight years longer⁴. Under the irrigated system of fruit production in California, which would have a general similarity to conditions in the Delta of Egypt by reason of the rainy season, fig trees begin to produce somewhat in the second or third year of growth, and date trees fruit abundantly at seven years⁵. Since there is a period of years with all young fruit trees when they produce nothing at all and a following period when the production is not at full bearing, and since, according to the Revenue Laws, all orchards in the time of Ptolemy Philadelphus were given in for assessment, we must allow for a number of years when the orchards would be declared for taxation, as required, and then be found, officially, to be ἀτελεῖς, that is exempt as being still non-producing.

Another papyrus of the Zenon archive published by C. C. Edgar in 1920 seems to throw some light, indirectly, upon the matter⁶. It reads as follows:

¹ Under the caption "Against Confounding (i.e. taxable with untaxable fruits and vines)," P. Rev. 28, 16-29, 1, [ἐ]ὰν δὲ τοῖς ἀτελεῖσι τὰ ὑποτίλη γενή[μα]τα.....

² Including one apple variety which bore two crops each year. See C. C. Edgar's publications of papyri of the Zenon group (P. Cair. Edgar) in the *Ann. Serv.*, vols. 18-24, numbers 21, 79, 94, 95, 100.

³ P. Cair. Edgar 79 and introd., 94, 100; P.S.I. 488, 12, where a "royal garden" at Memphis is mentioned.

⁴ FOLGER and THOMSON, *The Commercial Apple Industry of North America*, New York, 1921, 449.

⁵ LIBERTY HYDE BAILEY's *Cyclopedia of American Horticulture*, s.v. I regret that similar information upon fruit crops in modern Egypt was not available to me.

⁶ P. Cair. Edgar 38, also discussed fully by M. ROSTOVZKEFF in his *Large Estate*, 100.

"To Diotimus, dioecetes, greeting. Neoptolemus a Macedonian of the cleruchs in Philadelphia.

My father, Stratippus, is being treated unjustly by Theocles, ex-oeconomus of the Aphroditopolite nome, and Petosiris the royal secretary. For when making the assessment against the vineyards, they (customarily) assessed a third, taking the crops of three years (as the basis). But in the case of my father they have made the assessment on a basis of two years, stating that the vineyard is a newly planted one. I therefore beg of you, please, to look into these matters, and if they be true, since they make the assessment against the rest also on the three year basis, to give me an order addressed to Hermolaus and Petosiris that they are to make the assessment against my father also on the three year basis, starting, if they desire, either from the twenty-ninth year, or from the thirtieth year. For we have already made wine from it (the vineyard) for four years. And bid them credit to him the money paid into the bank from the wine-retailers from wine which they took from the vineyard, in order that he may through you meet with justice.

With best wishes."

Docket on verso: "Neoptolemus to Diotimus, petition concerning vineyard."

The general features of this petition have been given by Edgar in his explanatory introduction to the text. Neoptolemus was himself a vine-grower at Philadelphia (P.S.I. 429 and 434). Diotimus was actually a sub-dioecetes. Theocles had been oeconomus of the Aphroditopolite nome when the assessment was made, but had been succeeded in that office by Hermolaus before the petition was sent in by Neoptolemus. The third of the crop here assessed against the vineyard was, in the customary explanation of this and similar passages, the "regular" or "main" vineyard tax, "regular" as distinguished from the "sacred tax" of a sixth¹. Such a tax ($33\frac{1}{3}\%$ in the case of Stratippus), combined with the sacred tax of a sixth, would give a total of 50% of the vine crop taken for taxes alone in that year. Because of the theory of ultimate ownership of all arable land by the Crown which then prevailed in Ptolemaic Egypt and the confiscatory character of a 50% annual tax, I am forced to the conclusion that the assessment (*ἐπιγραφὴ* in the petition of Neoptolemus) must be regarded either as a rent or as an assessment including both tax and rent. In view of the uncertainty still prevailing upon this point, it may be best to call it an *epigraphe*, or assessment, leaving its exact character in doubt.

As I interpret the document, Stratippus, a cavalryman in the corps of Antigonus and "owner" of a cleruch holding in the Aphroditopolite nome², had been assessed a third of his vine crop for the year 32 of Philadelphus. This *epigraphe* of a third of the crop was customarily based on an average of the crops of the preceding three years, as represented by the money which came in through the sale of the wine by licensed retail dealers. But in the case of newly planted vineyards, the nome officials based the assessment on the average production of the two preceding years³. This must have been a regular under-

¹ See ROSTOVITZEFF, *Large Estate*, 99; P. Cair. Edgar 38 introd. Rostovtzeff has explained (p. 101) the manner in which this "main tax, the one-third," as he defines it, was paid into the royal banks in money. In a sense it was a payment in kind, but through the agency of retail dealers in wine, under government control, it was converted into a money payment to the government.

² P.S.I. 632, not dated. Note *ἐπαρχόντων ποτ ἀπικιλέοντων* in line 2.

³ The *epigraphe* was still a third, not a half, as Rostovtzeff states, basing his conclusion upon P.S.I. 508. If it had been a half of the crop, Neoptolemus would certainly have said so. Furthermore it was the government's intention to minimize the rent and tax burden on newly planted vineyards, not to increase it.

standing between the government and those who had begun the development of vineyards; and the officials who were competent in the matter must have had some definite law upon the subject to which they could refer.

The explanation of the two year average insisted upon by the oeconomus and royal secretary lies in a fundamental feature of commercial viticulture. The calculations of modern grape growers (LIBERTY HYDE BAILEY's *Standard Cyclopaedia of Horticulture*, III, 1380) concede an expenditure in vine development for the first three years which is almost four times the return. A small crop is produced in the third year. A slight profit appears in the fourth year, and it is only in the fifth year that the vines come to full bearing. Approaching the petition of Neoptolemus from the agricultural point of view, his complaint regarding the assessment against his father's vineyard is to be explained as follows. The customary method of determining the *epigraphe* was to take an average of three years' production, and place against the vineyard an assessment of one-third of that amount. In the case of new vineyards it was customary to take a two years' average as the basis. For the first two years of a vineyard's growth this would mean no income to the government, because there would be no grapes produced; for the third year a small one, if any at all, which could only be included in the *epigraphe* of the fourth year of the vineyard. Neoptolemus asserts that his father had been making wine off the vineyard for four years. Assuming normal conditions of growth, the vineyard would have been in its sixth year of development when Neoptolemus wrote his complaint. The oeconomus, Theocles, and the royal scribe, Petosiris, had fixed the assessment on the understanding that the vineyard still came under the classification of "newly planted" vineyards, that is upon the full production years five and six. If, on the other hand, the claim of Neoptolemus were acceded to, the assessment would be considerably lowered because it would be exacted upon the average of the government's income from three years' yield, upon two years of full production (years six and five), but considerably lowered by being weighted with the lighter crop of year four of the vineyard's growth. Neoptolemus was willing to accept an assessment figured upon the three year average, whether the officials began their calculation with the twenty-ninth or with the thirtieth year. Naturally—as the following table will easily show:

Year 27.	First year of the vineyard	No grapes
" 28.	Second "	"	" " "
" 29.	Third "	"	" Small crop
" 30.	Fourth "	"	" Increased crop
" 31.	Fifth "	"	" Full production
" 32.	Sixth "	"	" " "

If the assessment were to be figured on the years 29, 30 and 31, Neoptolemus' father would then be paying on an average taken from *two years of low production* combined with only one year of full production.

It is impossible to determine whether the contention was justified which Neoptolemus entered in behalf of his father against the *epigraphe* as calculated by the bureaucrats. The bureaucrats had made the assessment upon a basis which would bring in to the Royal Treasury a maximum income from the vineyard, based upon the grape crop of years six and five. The legal question may be clearly stated thus:

Was a vineyard in its sixth year, according to the then existing laws, still to be classified and assessed for this *epigraphe* as "newly planted"? The officials felt that it was.

Neoptolemus protested that when a vineyard had produced wine for four years, it was not. The bureaucrats were, presumably, right. It was their business to know the rent and tax arrangements, and to assess accordingly. It may be observed, also, that Neoptolemus does not contend that "the rest" of those assessed on the three year average were holders of newly planted vineyards. This point he would assuredly have made had it been the case. It was the business of the officials to bring in to the government as much in rent and taxes as the existing laws would permit. It was the privilege of the tax-payer or lessee to show his rents and taxes at as low a rate as he could, even if he were compelled to turn a sharp legal corner to do so. This is an old, old game.

Whether my contention is right or wrong that the petition of Neoptolemus had to do with rent, or both rent and tax, one point of some importance in the system of the Ptolemaic revenues of the third century before Christ is fixed by his appeal. This point is that the state revenue from vineyard production was regularly assessed by the "average year system," the custom being to take a two year average for newly-planted vineyards and a three year average on full-bearing vineyards. With a crop which was naturally variable, with expectation of shifting seasons of good and bad production¹, as is the case with all berry and fruit crops, the purpose was obviously to equalize the government's income from this source from year to year. The advantage to the fisc arising from the average year system as applied to fruits is clear. The government could count upon a stabilized revenue from a field of production in which a system of obtaining taxes and rents by assessment against the production of a single year would have resulted in a highly variable revenue. In the fiscal system of the ancient states, which lacked the provisional budget system of modern states, this method of equalization would be distinctly advantageous. The advantage to the producer from the consequent equalization of his tax and rent burden is not so clear. This result would have been an advantage to him, so far as I can see, only in case he had such a reserve of accumulated capital that the increased burden of his years of poor grape production could be easily and conveniently met. Perhaps we may be justified in assuming that the vine growers in Ptolemaic Egypt of the third pre-Christian century were men of this rather well-to-do type, since indeed the Zenon documents show that it was almost exclusively the Greeks who were going in for viticulture.

There are two possible methods of explaining the exemption of Apollonius' orchards from the tax called the *apomoira*, which appears in the Columbia papyrus published at the beginning of this article. The first, and simplest, would be to assume that there was a fixed term of exemption for newly planted orchards, covering a definite term of years, with a reduced tax for several succeeding years. Such an arrangement we find in the amnesty decree of Energetes II, promulgated in 118 a.c.² Vineyards and orchards which, within three years after promulgation of the decree, were planted upon dry or swampy land were to be left untaxed for five years and were to have a reduction of the customary tax for three years thereafter.

¹ Thirty years ago in the mid-western section of the United States, amateur producers of grapes in their small gardens used to speak of the years of unaccountably poor production of the vines which covered their trellises as "rest years." This tendency toward heavy cropping followed by light production is called "alternate fruiting" in *Science and Fruit Growing*, by the Duke of Bedford and Spencer Pickering, London, 1919, 132.

² P. Teb. I, 5, 93-98.

The second method would be to apply to Apollonius' fruit trees the system of the production tax as it has appeared above in its application to the assessment (*ἐπιγραφὴ*) upon the vineyard of Stratippus in the time of Apollonius and Zenon. This would have been the more equitable system, from the standpoint that different fruit trees come to maturity at different ages. Furthermore the Revenue Laws show that when the government of Egypt took over the sacred tax of one-sixth from the temples in the year 22, it called for statements of the amount of the gross annual production and the amount of the sixth which had accrued to the temples from vineyards and orchards during the three years 18, 19 and 20 of Philadelphus. This was to be the basis for reckoning the tax by the government officials. At least no other explanation presents itself for this action¹. It implies that the government used the average year system in taxing fruits and vines, and had, indeed, taken it over from the temple administration of this tax when the tax itself was taken over.

Conversion of Kind into Money Taxes and Rents.

In the petition of Neoptolemus quoted above, his final request is difficult to explain. He asks the sub-dioecetes to send orders to the oeconomus and royal secretary that they credit his father, Stratippus, with "the money paid into the bank from the wine-retailers from wine which they took from the vineyard." Rostovtzeff's explanation of the method by which this *epigraphe* on the vineyards was assessed and collected is in the main correct, and it explains the case presented here by Neoptolemus². But there are minor features in respect to which I differ with Rostovtzeff's treatment, and the method of conversion of production tax, received primarily in kind, into a money tax needs a more exacting treatment than he has given it.

The entire system becomes clear if one assumes that the oeconomus, in calculating the *epigraphe* of this petition³, took as his basis for the assessment of one-third, not the three year average of total production in kind of the vineyard, but the three year average of production as represented by the money income therefrom according to the market price earned by the licensed retail dealers in wine. It was surely the oeconomus, not the tax farmer and the cultivator, as Rostovtzeff has it, who determined the value of the *epigraphe* in money. This the petition of Neoptolemus shows. In determining the amount of the third of Stratippus' vineyard return which must come into the government in money at the local bank, the oeconomus had two factors to consider: first, average production for the three preceding years; second, average market price of the wine for these three years. After he had determined, on these two bases, the value of the *epigraphe* of one-third for all the vineyards in his jurisdiction, he could sell the right to collect this *epigraphe* to the tax farmers—and *only then*.

The tax farmers were the intermediaries between the fruit and wine production of the cultivator and the government bank. Their agents—actually a more important factor economically than the tax farmers—were the licensed dealers in wine. These humble

¹ P. Rev. 37, 10-18. Grenfell was mistaken in his statement (note to 37, 14) that the government wished to take the average of four years, the 18th—21st inclusive. Also I believe that this information was not so much for the use of the tax farmers as for the government officials.

² *Large Estate*, 99-101. Also accepted, in its general application, by C. C. EDGAR in *Ann. Serv.*, xxxiii, 76.

³ It applies to the tax of a sixth on vineyards and orchards also.

retailers took the wine, sold it, and turned the cash into the bank¹. It was necessary for the tax farmers, who customarily sold the wine to the retailers, to get from the cultivators in wine, *not* one-third, but more than one-third. This seems to me to be certain, for the government was to receive a third in money. The tax farmers must therefore make their agreement with the cultivators as to the amount of wine they would take with numerous factors in mind. First, there was the *epigraphe* of a third due to the government, stated in terms of money on the average year system. Second, there was the quality of the wine to consider. This is a highly variable factor, determining somewhat the market price. Third, there was the market price itself, which again must have been fluctuating aside from quality, as we know of no government price fixing in the field of wine production; and government price fixing seems entirely out of the question in dealing with horticultural products. Just where the profits of the tax farmers and the retail dealers came in, I cannot say; but they were either extracted from the excess of wine taken by the tax farmer, over and beyond the government's third, or they were paid out of the third taken by the government—which seems highly doubtful.

Considering these fluctuating factors, in order to bring in for the government with certainty a third in cash the tax farmers must have taken out of the wine made by the cultivators considerably above a third of their gross annual production. This was all sold by the retailers and the money turned into the bank. When the government had taken its third in money and the bank had given official receipts for it, the surplus remaining at the bank from the sales for each cultivator were either paid to the cultivator by the bank or credited to his account. In the Revenue Laws there was a provision that in case the cultivators did not transport the wine for the tax farmers, they must pay definite sums per *metretres* of wine to the tax farmers in lieu of transport. This money the *oeconomus* was to exact from the cultivators and pay over to the bank to the credit of the tax farmers². The *oeconomus*, then, was responsible for payments and credits at the bank. If he could grant credits, he could also withhold them. In the petition regarding Stratippus, it is clear that this vineyard holder had given to the tax farmers an amount of wine agreed upon between them. The wine had been sold. The money was in the bank. But the disposition of the money by the *oeconomus* and royal secretary was being held up by the petition of Neoptolemus, both the third due to the government and the surplus which would be credited to the account of Stratippus so soon as the government banker should have receipted the payment of the tax. It is this surplus, remaining after the acceptance of the *epigraphe* on the basis of the three year average, which he desires the *oeconomus* to have credited to him.

A number of ostraca receipts have been published of the Ptolemaic period for taxes on fruit crops (*ἀκροδρύων*) and on the *apomoira*, which seem to me to show similar surpluses remaining in the banks as deposits to the credit of the cultivators after the deduction of the government's requirement out of the money turned in from the sale of the produce. As the problem involved in these receipts is a difficult one and has as yet received no other

¹ Note carefully in the petition of Neoptolemus, P. Cair. Edgar 38, 8-9, τὸ πεπτωκὸς ἐπὶ τράπεζαν ἀργύριον παρὰ τῶν οἰνοκαπῆλων οἶνον αὐτὸ λαβεῖν ἐκ τοῦ ἀμπελώνας. The tax farmers were not concerned here because they customarily took enough wine to cover themselves and their bondsmen adequately.

² P. Rev. 31, 15-16. I accept Wilcken's reading suggested in *Gr. Ostraka*, 159, note 2, ἀποτινίσκω τῆς ἐναφελομένης αὐτοῖς ἀποκομιδῆς τὴν τιμὴν in place of Grenfell's ἀπομοίρας τὴν τιμὴν.

satisfactory explanation¹, I reproduce a typical sample for the tax on fruits as well as for the *apomoira* (which may include both the tax on wine produce and on the fruits).

Receipt for fruit produce (ἀκροδρῖων) from excavation at Elephantine.
Script of the 2nd century B.C.

"Year 32. Thoth. There has been paid into the bank in Syene over which Ammonius (is director), for the same year, on fruit produce by Taponraus, son of Tarees, in copper on which exchange (has been taken) one thousand 650 (drachmas). Total 1650. Ammonius, banker. Sarapion. 2100 (drachmas)²."

Ernst Kühn, the editor, has explained that Sarapion was a subordinate official of the bank and that the receipt, which is written in a single hand, was made out by him. It was signed by him for Ammonius, the state bank director.

Receipt for apomoira from Thebes, dated November 26th, 123 B.C.

"Year 48, Athyr 5th. There has been paid into the bank in Diospolis Magna for the Coptite nome on *apomoira* of the 48th year by Hermione, daughter of Apollonius, one thousand six hundred (drachmas). Total 1600. Ptolemaeus, banker. 1750 (drachmas)³."

The estate upon which the woman Hermione paid her *apomoira*, as I understand the case, was in the administrative district of Diospolis Magna. There the wine was sold and the money paid to the state bank. Her official domicile (*idia*), however, was in the Coptite nome; and there her obligations to the government must ultimately be checked. For this reason the statement is included in the receipt that the payment was "for the Coptite nome." Through the regular channels of the state bank system the knowledge of the payment would be sent to the officials in the Coptite nome by the officials of Diospolis Magna⁴.

Kühn, in publishing his ostraca of the Berlin Museum⁵, has subjected his examples of state bank receipts which show these double figures to a statistical analysis. His result is that in nine receipts out of ten from the bank at Syene, the relation between the two figures given on the receipts is that the larger figure is 20 % higher than the one in the body of the receipt. Kühn has taken his percentages in round numbers, apparently, and his results are consequently not precise. The difference is actually an exact 20 % in only five cases, but three of these occur in cases of the tax on fruits⁶. An explanation of these bank receipts with two figures in order to be acceptable must be capable of being brought into a rational agreement with the sharp observation which Kühn has presented.

¹ See PAUL M. MEYER, *Griechische Texte aus Aegypten* (Berlin, 1916), 123, and ERNST KÜHN in *B.G.U.* VI (Berlin, 1922), 94.

² *B.G.U.* VI, no. 1307.

³ PAUL M. MEYER, *Gr. Texte*, ostrakon no. 2, p. 123.

⁴ In one point I cannot accept Meyer's explanation of his ostraca, nos. 1, 2 and 3. In all these the receipts are for people whose official domiciles are in the Coptite nome. Therein we agree. But Meyer would place their estates also in the Coptite nome. In that case the tax farmers and officials of the Peri-Theban district would find it very difficult to determine the amount of the produce and the tax, as the system required.

⁵ In *B.G.U.* VI.

⁶ Kühn's percentages of the surpluses should read as follows: fruit tax, nos. 1307, 1308, 1309—20 % in each case; tax of one-fourth on fisheries, no. 1314—20½ %, 1315—18⅞ %, 1317—20⅞ %, 1318—15 %; *eparourion*, no. 1354—7½ %; tax of one-third on boats, nos. 1378, 1379—20 % in each case.

In view of this necessity I present the two following tables of the published bank receipts for the tax of one-sixth on fruits and the *apomoira* for the Ptolemaic period, selecting those ostraca giving double figures which are both legible.

TABLE I. BANK RECEIPTS FOR FRUIT TAX WITH DOUBLE FIGURES¹.

Time	Editor	No.	Place	Amount of Tax	Amount in Bank	Percentage of Surplus
Ptolemaic	Wilcken	1	Syene	500 dr.	600 dr.	20 $\frac{1}{2}$ %
2nd Cent. B.C.	Kühn	1307	Syene	1750 dr.	2100 dr.	20 $\frac{1}{2}$ %
103 B.C.	Kühn	1308	Syene	525 dr.	630 dr.	20 $\frac{1}{2}$ %
1st Cent. B.C.	Kühn	1309	Syene	1500 dr.	1800 dr.	20 $\frac{1}{2}$ %

Bank receipts showing payment of fruit tax, but with no second figure, are: Wilcken 1346, 1491²; Kühn 1304.

TABLE II. BANK RECEIPTS FOR *Apomoira* WITH DOUBLE FIGURES.

Time	Editor	No.	Place	Amount of Tax	Amount in Bank	Percentage of Surplus
127 B.C.	Viereck	21	Thebes	4000 dr.	4400 dr.	10 $\frac{1}{2}$ %
123 B.C.	Meyer	1	Thebes	3 Tal. 5375 dr.	4 Tal. 1000 dr.	6 $\frac{3}{16}$ %
123 B.C.	Meyer	2	Thebes	1800 dr.	1750 dr.	9 $\frac{1}{16}$ %
121 B.C.	Viereck	24	Thebes	750 dr.	1000 dr.	33 $\frac{1}{3}$ %
119 B.C.	Wilcken	352	Thebes	3360 dr.	3700 dr.	under 10 $\frac{1}{2}$ % ³
118 B.C.	Kühn	1337	Thebes	800 dr.	880 dr.	under 10 $\frac{1}{2}$ % ³
101 B.C.	Wilcken	354	Thebes	1525 dr.	1700 dr.	11 $\frac{1}{2}$ %
20 B.C. (?)	Wilcken	355	Thebes	3 Tal. 975 dr.	3 Tal. 2000 dr.	5 $\frac{1}{4}$ %
Ptolemaic	Wilcken	322	Thebes	2280 dr.	2550 dr.	11 $\frac{1}{8}$ %
Ptolemaic	Wilcken	332	Thebes	1525 dr.	1735 dr.	13 $\frac{1}{2}$ % ⁴
2nd Cent. B.C.	Wilcken	1315	Thebes	2900 dr.	3080 dr.	10 $\frac{3}{4}$ %
2nd Cent. B.C.	Wilcken	1345	Thebes	1 Tal. 1600 dr.	1 Tal. 2400 dr.	10 $\frac{3}{4}$ %
2nd Cent. B.C.	Kühn	1338	Thebes	900 dr.	1000 dr.	9 $\frac{1}{2}$ %
2nd or 1st B.C.	Viereck	28	Thebes	6000 dr.	6600 dr.	10 $\frac{1}{2}$ %
138-137 B.C.	Wilcken	1518	Hermonthis	235 dr.	600 dr.	155 $\frac{1}{2}$ %
121 B.C.	Viereck	22	Hermonthis	2 Tal. 3240 dr.	2 Tal. 4860 dr.	10 $\frac{1}{2}$ % ⁴
117 B.C.	Meyer	4	Hermonthis	1180 dr.	1300 dr.	10 $\frac{1}{2}$ %
120-119 B.C.	Wilcken	1234	Coptus	4440 dr.	4970 dr.	11 $\frac{1}{16}$ %

Bank receipts showing tax payment for *apomoira*, but with no second figures, are: Wilcken 1235, 1526; Meyer 3, 5; Kühn 1340, 1341, 1342, 1343, 1344, 1346, 1347, 1348. Kühn 1345 and Meyer, p. 110 (note 13) are not included as being doubtful because of the subscription in demotic.

Keeping in mind the accidental and very fragmentary character of the data attainable⁵, the following results may be drawn from the materials presented in these tables:

1. A rather large number of the state bank receipts on fruits and the *apomoira* show two figures. They are fairly equal to the number of receipts which show only the tax payment.

2. The receipts for the sixth on fruits which show two figures all come from Syene. In the four cases available, the higher figure is just 20 $\frac{1}{2}$ % above the actual tax.

¹ In these tables, Wilcken=U. WILCKEN, *Griechische Ostraka*, Leipzig, 1899; Meyer=PAUL M. MEYER, *Griechische Texte aus Aegypten*, Berlin, 1916; Kühn=ERNST KÜHN in *B. G. U.* vi; Viereck=PAUL VIERECK, *Griechische und griechisch-demotische Ostraka*, Berlin, 1923.

² Wilcken no. 2 is fragmentary, but should possibly be included here.

³ Receipts for *apomoira* plus *eparourion*. The *eparourion* being a fixed payment per aroua, the surplus can only be on the *apomoira*. Its amount cannot be determined exactly.

⁴ Again *apomoira* plus *eparourion*. I have restored in Wilcken no. 332, $\beta\sigma\lambda[\cdot]$ to $\beta\sigma\lambda[\epsilon]$, on the observation that none of these receipts shows any final figure below 5. In these two cases the *eparourion* is given and can be subtracted.

⁵ Cf. Kühn's pertinent observation in *B. G. U.* vi, 94.

3. For the *apomoira* there are 14 examples from Thebes. Four of these show an exact 10 % preponderance of the higher figure over the amount of the tax.

4. Both figures have a marked tendency to run in tens of drachmas. There is only one receipt which has come under my observation which shows any final figure under five drachmas.

The average year system of computing the tax and collecting the returns in fruit and wine taxes to the government, in the form suggested above for the third century, may certainly be applied to the group of receipts for *apomoira* of the second and first centuries B.C. It is hardly possible that the sales made by the retailers always resulted in figures ending in five or ten drachmas. From the observation that *all* the bank receipts for *apomoira* end in multiples of five or ten¹, the conclusion is to be drawn that lesser numbers of drachmas disappeared in exchange, and into the profits of the tax farmers and retailers. The notable tendency in the Theban receipts toward a 10 % ratio of the surplus in relation to the tax needs an explanation. My conclusion would be that the tax farmers of the *apomoira* in the Theban nome figured upon taking in kind a surplus of about 10 % over the tax or rent required from the tax-payer's annual produce. Furthermore, allowing for the fact that odd numbers under five drachmas fell to the profits of the intermediaries between the collection of the produce and the state bank, the 10 % surplus in money return could often be figured exactly. This result could only be attained in years of normal quality of the wine and normal market price. Divergences from the 10 % surplus must, conversely, be explained as due to variations of quality of the wine produced and of the market price. The bank receipts which show no surplus may easily be explained in both lists on the understanding that the tax-payer accepted his surplus in cash when he received his receipt from the bank.

The four receipts with double figures for the sixth on fruits (Table I) do not fit easily into the scheme proposed, in that the second figure is, in each case, exactly 20 % above the tax payment as given in the bank's receipt. The possibility that this result is a peculiar accident of the discovery of ostraca could be reasonably advanced if the receipts were all of the same year as well as place. But this is not the case. The two amounts upon the bank receipts make it seem certain to me that this tax on fruits was still farmed in the second and first centuries B.C. The only remaining explanation is that in the Syene district the fruit crop, as figured in money return, could be forecasted with certainty because of local conditions; and that the local custom of the Syene tax farmers was to figure upon taking in a 20 % surplus of the produce, which went to the credit of the tax-payer at the bank. In that event we must conclude that the continued and unnecessary collection of the 20 % surplus was due to the conservative and traditionalized character of the bureaucratic system which, having once begun to take in this amount, could not abandon the habit.

Zenon as Oeconomus.

Returning to the Zenon papyri, we have a document from an unknown agent addressed to Zenon², which shows in some detail the relation between the oeconomus and the tax farmer in the collection of taxes and government rents on vineyards. It reads:

¹ There is one instance, that of a small tax payment for the sixth on fruits (*ἀποβόιον*), which deviates from this rule. See *B. G. U.* vi, 1304, a receipt for 2 drachmas 2 obols. Being fragmentary, it does not appear in the list given here.

² P.S.I. v, 508. My interpretation of this letter differs so completely from that given by ROSTOVITZEFF, *Large Estate*, 100, 103, that a full discussion of it is necessary.

"I have made a statement to you below of the vineyards which Damis has bought (i.e. for which Damis has bought the tax-farming privilege¹), given separately, and how much each pays. Therefore announce to me receipt (of these amounts) in his behalf, and he will order that the wine be released². If you need anything from him³, send some one and we will give it to him.

Good-bye. Year 30, Phaophi 9th.

From the (holding) of Phaneius, out of 180 drachmas, the third. 60 drachmas.

And from the (holding) of Amphistratus, out of 210 drachmas, likewise (i.e. again the third). 70 drachmas.

From the (holding) of Horus, son of —amos, out of 145 drachmas, likewise, 48 drachmas 2 obols.

From the holding of Hierus, out of 550, the half. 275.

(Two broken lines.)

out of 1046 drachmas 2 obols, the half. 523 drachmas 1 obol.

(Verso) To Zenon."

The list appended to the letter is the estimate of the oeconomus' office upon the total wine produce of definite estates, with the *epigraphe* (rent?) of a third or half which must come in to the government. I must call attention again to my belief that it is quite out of the question to assume that the *epigraphe* is a tax, as Rostovtzeff asserted. Add to the 50 %, if regarded as a tax, the *apomoira*, usually a sixth. The amount taken by the government in taxes out of the vineyard would then be 66⅔ % of the total income of the vineyard. A production tax of that amount would be plunder.

Damis must be the tax farmer. Zenon's agent reports that the amounts have come in and asks, in behalf of Damis, that Zenon acknowledge receipt of these amounts. Thereupon Damis will order (for Zenon) that the portion of the wine remaining to the producers may be "released" for sale, *καὶ π[ρ]οσάξει ὅπως ὁ οἶνος [σοι] ἀφεθῇ*⁴.

If my understanding of this letter and list is correct, Zenon must have been holding the position of oeconomus in the official year 255–254 B.C. In P. Cair. Edgar 16 (not dated), he was definitely addressed as oeconomus; but Edgar, assigning the letter to the year 28 on slight indications of the contents, did not accept this as an official title⁵. On quite different grounds, connected with the petition of two weavers that Zenon give them work and assign lodgings for them and their families at Philadelphia⁶, Axel Persson has also drawn the conclusion that Zenon was oeconomus in the official sense in year 30, as well as in later years⁷. It is rather to be expected than not that Apollonius would have

¹ *ἐν ἡγόματι Δάμις*. ROSTOVITZEFF, *op. cit.*, thinks that Damis had bought the vineyards. But *ὁ ἡγοπάριος, ὁ ἔχων* and *ἀρχαῖος* are interchangeable terms for the tax farmer, as stated by Grenfell in his notes to P. Rev. 24, 17 and 34, 11. The names of the real holders of these vineyards are all given in the list appended to the letter.

² *[σοι] ἀφεθῇ* in the text. I do not understand the significance of these brackets in Vitelli's text.

³ In the way of further official statement or documents.

⁴ Vitelli, the editor, felt that *προσάξει* was a mistake for *πρόσραξον* or *προσράξει*. The text is quite correct, and quite clear if one understands that Damis is the tax farmer. *ἀφίειναι* is the technical term for releasing for sale the wine held by the wine growers.

⁵ ROSTOVITZEFF (*Large Estate*, 29) follows Edgar in refusing to accept the title oeconomus given to Zenon as that of a provincial official.

⁶ P.S.I. 341, to be dated in the fall of 255 B.C.

⁷ AXEL W. PERSSON, *Staat und Manufaktur im römischen Reiche*, Lund, 1923, 12, 14.

strengthened the hands of the chief agents of his varied activities by appointing them to official positions from time to time. Nicanor, one of the chief men in his employ in the period 260-255 B.C., was at one time a sub-dioecetes¹. In a papyrus now at New York University, he appears with the additional title of nomarch². C. C. Edgar refused to accept the title of oeconomus for Zenon as that of a state official because Zoilus was oeconomus of the Arsinoite nome in the year 29 or of that section of it in which Philadelphia was situated. But it is not necessary that Zenon be regarded as anything more than one of the local officials who had the title of oeconomus, under the general direction of the chief oeconomus of the nome. If we regard Zoilus as *chief* oeconomus, which is entirely possible, and recall that he is known to have held that position only in the year 29, there is no difficulty in the way of assuming that Zenon was a lesser oeconomus in the year 30.

¹ P.S.I. VI, 632, 11.

² The document, an *hypomnema*, is being prepared for publication by Kraemer.

EGYPTIAN THERIOMORPHIC¹ VESSELS IN THE BRITISH MUSEUM

By S. R. K. GLANVILLE

With Plates XII to XVI.

The most important objects published in this paper are three stone vases illustrated on Pl. XII, Figs. 1-6, and Pl. XIII, Figs. 1-3. It was impossible, however, to avoid some comparisons with similar material, and this in turn led inevitably to a discussion of the origin of this type of vase, thus widening the selection of material. In writing the paper I have had the advantage of frequent discussions with Dr. Hall, the Keeper, and Messrs. Sidney Smith and C. J. Gadd of the Department of Egyptian and Assyrian Antiquities. Their assistance has not always stopped short at discussion, as will be seen from the references in the text. I have to thank the Keeper for permission to publish the objects illustrated which are in the Department of Egyptian and Assyrian Antiquities. I am also indebted to Mr. T. A. Joyce, Deputy Keeper in charge of the Ethnographical Department, to Mr. E. J. Forsdyke, Assistant-Keeper in the Department of Greek and Roman Antiquities, and to Mr. Einar Gjerstad, for valuable help on certain points. Finally, I have been very considerably helped by a discussion of the whole subject with Mr. H. Frankfort, who was the first to raise the interesting and important question of the origin of these vases, and to whom I owe much for his suggestive theories, although I cannot find all his arguments convincing or agree with some of his main conclusions.

The three stone vases shown on Pl. XII, Figs. 1-6, and Pl. XIII, Figs. 1-3 are now exhibited side by side in Wall-case 156 of the Fourth Egyptian Room. They were acquired by the Museum in 1901, 1902, and 1914 respectively, and nothing is known of their earlier history. This small collection is important both as a series (for there has been little or no attempt hitherto to distinguish the different types of these early stone theriomorphs) and for the detailed study of the individual vases. But in so far as the individual characteristics, technique, artistic merit and hypothetical use are of most value when studied in connexion with one another, or even with another set of characteristics displayed by other objects, it was clearly more profitable for scientific purposes (not to speak of aesthetic claims) to exhibit the three vases together than to attempt a more precise individual dating which might require their separation from each other. It is proposed to describe each one separately first, and then to consider them in relation to other material.

B.M. 35306 (Pl. XII, Figs. 1-3)² is a red breccia vase in the shape of a dove and of

¹ For the sake of brevity this word has been allowed a wider meaning throughout the article than it should carry, in order to include *birds* and *fishes*.

² See *Guide to the Third and Fourth Egyptian Rooms, etc.*, 1904, p. 244, Pl. VI, where it is shown with a selection of predynastic and archaic stone vases. The same plate is to be found in the latest *Guide to the Fourth, Fifth and Sixth Egyptian Rooms, etc.*, 1922, p. 12, Pl. I. Also BUDGE, *The Mummy* (2nd edition), Pl. XXVI, 2.



1



4



2



5



3



6

1-3. Breccia vase in the form of a dove. B.M. 35,306. *Scale 1/2*.
4-6. Bird-vase in green serpentine. B.M. 36,355. *Scale c. 1/2*.

the finest workmanship. Its length from beak to tail is $7\frac{1}{2}$ ins., height to the top of its head $4\frac{1}{2}$ ins., and greatest width $3\frac{1}{2}$ ins. The body has been hollowed out so thoroughly as to give not only the effect but the use of a vase. The only opening in this receptacle is a hole in the top, finished with a very low splayed neck, or rather a rim simply, such as is typical of the finer vases of the earliest period. The diameter of the hole itself is only $1\frac{1}{16}$ ins.; and with the rim $1\frac{1}{8}$ ins. It is to be noticed that the back of the bird slopes upwards appreciably on either side of the rim, thus allowing the drill a wider angle of play without which the stone-cutter could never have reached so far towards the head and tail as he has done. Another common feature of the early stone vases, the pierced horizontal lugs, is also found, one on each side of the bird; the effect of these, doubtless appreciated by the artist but not to be taken as necessarily intended by him, is in a general way to suggest wings. The head is neatly and faithfully rendered, leaving no doubt in the mind as to the identification with a dove or pigeon. The eyes are small, shallow, smooth-bored holes to take inlay, probably of the kind that is found in the exactly similar eyes of the predynastic Hathor amulets¹ and many of the slate palettes, namely a shell or faience circular bead with or without filling of paste. The exceedingly fine workmanship, shown not only in the delicate cutting of the rimmed opening and the fine modelling of the head, but also in the proportions and smooth finish, points conclusively to a much earlier date than the First Dynasty (when both the rim round the hole and the eyes are considerably debased): and when we add to that the mechanical skill which hollowed out the body to a depth of 3 ins., it is impossible to place this vase later than the middle predynastic period, when the art of stone-cutting was still at its zenith. Moreover it will be generally admitted that there is no other vase of this kind published which can compare with it in fineness.

B.M. 36355 (Pl. XII, Figs. 4-6) would also appear to represent a bird, but it is perhaps unwise to attempt a closer definition. The length from beak (?) to tail is $4\frac{1}{2}$ ins. and the greatest height $3\frac{1}{16}$ ins. The body is hollowed out to a depth of nearly 2 ins., but the hole in the back is much larger in proportion than that of the pigeon, having a diameter of $1\frac{1}{8}$ ins. (with the rim $2\frac{1}{16}$ ins.). The rim again is simply a low flat ring rising from the back $\frac{3}{16}$ in., showing no undercutting, and it varies in width. The eyes are larger and deeper than in the dove, and there has been no attempt to polish away the ridges left by the drill. The base is flat, consisting of two thick straight ridges running in the same sense as the bird's body, and not quite parallel to one another. These appear to represent legs, so that the bird would be seen squatting on the ground². There is a horizontal lug with rather large boring on each side. The material is green serpentine, but a bad smash at some time in its early history has necessitated the restoration of the left lug and a patch in the back—both in coarse cement. Thus we have here the three characteristics of the stone vases, eyeholes for inlay, pierced lugs and rimmed mouth. These are first found in the early predynastic period, and reach perfection in the middle and later predynastic periods; they are already debased in protodynastic times and disappear at the end of the

¹ Well illustrated in PETRIE, *Amulets*, Pl. XXXVIII, nos. 212 a, b, c, etc. and there called rams' heads (p. 44), but later (*Prehistoric Egypt*, p. 11) recognised to be ox-heads. Petrie further particularises them as "bulls," but the Hathor-cow seems a more attractive identification and at least as probable. There would be a special point in using the symbolic head of the goddess as Bucrania.

² Cf. two bird vases illustrated in *Délégation en Perse*, VII, 19, Figs. 11 and 13.

Old Kingdom. But whereas in the dove these characteristics were at their best, in this shapeless bird they have considerably deteriorated, and we shall be strongly inclined to date the vase to the archaic period—perhaps, in view of other evidence, more precisely to the First Dynasty. Indeed it may well be compared to the two bird vases from the "Main deposit" at Hierakonpolis¹ dated to the First Dynasty, although one of these is of slightly superior workmanship.

Our third vase, B.M. 53888 (Pl. XIII, Figs. 1-3), though perhaps the least attractive artistically is in every other way the most interesting of the group, and by the same token presents the most difficult problems. It is of pink limestone (the polished surface brown with age), $6\frac{7}{8}$ ins. long by $5\frac{1}{4}$ ins. high by $2\frac{7}{8}$ ins. wide. Nearly the whole of the body has been hollowed out, leaving a deep elliptical well the longitudinal walls of which are only $\frac{5}{16}$ in. thick for the greater part. The sides are almost perpendicular, indicating an entirely different technique from that used in making the bird vases just described. The body almost rests on the ground, four protuberances at the corners representing (with surprising realism considering their shortness) the legs of some bulky animal. The tail is fairly thin, measures about half the height of the beast, and is barely indicated by a slight ridge down the back of the vase. In the head, however, the salient features of the animal have been carefully preserved: the ridged dome to the skull, the broad forehead, the position of the ears (though their shape has been missed and they are not large enough), the "pig" eyes, and above all the protruding lower lip all go to make absolutely certain the restoration of the snout as an elephant's trunk (Pl. XIII, Fig. 2)². The tail is then seen to be equally true to life, and the ridiculously short legs to enhance the general effect of massiveness which would be the strongest impression left on the mind of an Egyptian who had once seen a southern elephant. The absence of tusks is noteworthy when we remember that ivory was commonly in use from the earliest predynastic times. But the artist who made the vase probably had in mind as his model a tame beast—perhaps sent as a gift, perhaps traded, from Nubia³—belonging to the Pharaoh, and such a one might well have had his tusks sawn off before he reached Egypt.

Besides its theriomorphism and its hollowed out interior the elephant has no features in common with the bird vases. The eyes which alone might prove an exception are incised,

¹ QUIBELL and PETRIE, *Hierakonpolis I*, Pl. XX, 2 and 4. The following is a list of the important publications of the early stone theriomorphs: PETRIE and QUIBELL, *Nagada and Ballas*, Pl. XII, 80-84, and p. 36; GARSTANG, *Mahâna and Bêt Khallâf*, Pl. V; PETRIE, *Prehistoric Eg.*, Pl. XXXV, 44 and Pl. XLII, 207; Miss M. A. MURRAY, *Historical Studies*, Pls. XXII, XXIII, pp. 40 ff.; MÖLLER, *M.D.O.G.*, No. 30, p. 17, Figs. 16, 17; FRANKFORT, *Studies in Early Pottery of the Near East*, Pl. IX, 1, 2, pp. 73 and 111 ff.

² Our drawing of the trunk is, it must be admitted, a better representation of the object than the Egyptian could have produced! Since, however, it is impossible to tell what form his copy would have taken, it seemed best to make as realistic a representation as possible, without strict regard for the limits of simplicity imposed by the nature of the material.

³ Professor Newberry includes the elephant in his list of predynastic fauna on the evidence of the ivory knife handle in the Brooklyn Museum (*Egypt as a field for anthropological research*, Presidential address to the Anthropol. Section of the Brit. Association 1923, p. 5). It seems, however, to have been confined to the district of Egypt's southern boundary (see Bénédict in *Journal*, v, 237) as we should expect, and has disappeared by the dynastic period (Newberry, *ibid.*). To an Egyptian living even a little north of the district which later became the Nome of Elephantine, the elephant would have been a foreign animal.



- 1, 3. Pink limestone vessel in the form of an elephant. B.M. 53,888. *Scale 1/2.*
2. Suggested restoration of B.M. 53,888.
4. Wooden vessel in the form of a hippopotamus. B.M. 22,825. *Scale c. 1/2.*
5. Hyksos hawk vase. *Scale c. 1/2.* 6. Pottery vase in the form of a goose. *Scale c. 1/2.*



it is true, but in a different technique; and it is not clear that they were meant to receive inlay, though this is rather indicated by their unpolished surface. The striking difference, however, is in their careful imitation of the shape and tilt of the living animal's eyes, as compared with the conventional circular eyes of the birds, which are found on all the other animals—whether vases, slate palettes or amulets—of the technique that did its best work in the finer and harder stones. There are no lugs; nor is there any rim round the large hole which is where the animal's back would be. Indeed the plain undecorated edge of this opening seems to require a lid to complete it. There are, it is true, no signs of wear; but one may call to mind the "lid of a hippopotamus vase" found by Petrie on a predynastic site¹. Just below the edge of the opening the sides are pierced with three small holes, two at the back, roughly above the back legs, one in front in a corresponding position on the left side of the animal. Instead of a hole to balance this on the right side a semicircular notch, diam. $\frac{3}{4}$ in., has been cut out. The obvious supposition that this is an accidental chip appears at first belied by the smoothness of the surface, the rounded corners, and the symmetry of the cut. Further, the idea that it was part of the original design is encouraged by the fact that in the only known theriomorphic stone vessel (from Abusir el-Melek) which can compare with ours there appears to be a similar semicircular notch, in this case at the corresponding point at the back of the right side of the animal². The base of the notch in our object, however, is a groove pointing in the direction of the right ear and continued so for $\frac{3}{4}$ in. across the shoulders; and less is demanded of our credulity if we suppose that this groove is the remains of a fourth hole (which had admittedly rather lost direction), and that in the boring of it, or soon afterwards, the piece of the edge above it chipped off. The notch thus left was evidently smoothed down all round, and perhaps the prolongation of the groove must be attributed to an attempt to improvise some use for it in place of the intended hole.

As to the purpose of these holes there can be only two possibilities: they must have served either for suspension in some way, or to tie on the lid, if one existed. That there almost certainly was a lid I am convinced by the very definite flat edge of another vessel (B.M. 22825, Pl. XIII, Fig. 4), which differs from this type only in being made of wood. If the second possibility were correct, we should suppose that four pieces of string were knotted each at one end and passed from inside the vessel through the four holes and tied in pairs over the lid. It is hard to believe, however, that this is sufficient reason for the holes—or rather that it is not an unnecessarily elaborate method of keeping a lid in place. We are therefore left with the alternative possibility that the holes were used for hanging the vessel to some person or thing. It has been suggested to me that it was suspended round the neck of some animal, as part of a religious ritual. This is perhaps most in keeping with its theriomorphic nature, but until more evidence is forthcoming we cannot definitely say what purpose it served—nor indeed what it contained. That it was not an ordinary household utensil is, I think, clear from the rarity of this type of vessel, apart from its special features. On the other hand it may have been part of the ecclesiastical property of some temple.

¹ PETRIE and QUIBELL, *Nagada and Ballas*, 36, Pl. XII, 84.

² MÖLLER in *M.D.O.G.*, No. 30, p. 17, Fig. 16. The animal is there unhesitatingly stated to be a camel lying down; the identification is doubtless due to the shape of the neck, the doubled-under forelegs and the high back giving the effect of a hump well packed with bales, rather than to the head, which is not very convincing.

There are few criteria from which to date the vase. The general effect of shape, polish and stone indicates the predynastic to archaic periods¹, but the absence of the important characteristics we have noted in the theriomorphic vases as a whole during that period might suggest that our elephant belongs near its end, when the lug, rimmed opening and inlaid eyes were rapidly deteriorating; in this case we should expect it to be dated on general grounds to the first three dynasties. This would agree admirably with the more specific evidence of the Berlin camel vase (see p. 55, note 2, above) which was found at Abuṣīr el-Melek, and is thereby dated to the First Dynasty. In default of other evidence we may assume that the elephant vase belongs to the late predynastic period or to the First Dynasty.

We must now consider the wooden vessel referred to above. B.M. 22825 (length from snout to tail 8½ ins.: height 4½ ins., Pl. XIII, Fig. 4) represents a hippopotamus and should perhaps be described as a box, owing to its material. But in type—both as to form and details—it is so like the elephant vase that it must be closely related to it, and can be safely dated by that similarity alone to the late predynastic period. The only technical difference in the two styles is the representation of the eye. In the hippopotamus, instead of being incised and perhaps inlaid, it takes the form of a protuberance left in the wood. But the well-known bulging eye of the hippopotamus should be sufficient to account for this, since the distinguishing feature of the eyes of the elephant is also their realistic likeness to nature. The more pronounced (but still stubby) legs of the hippopotamus are doubtless due to the greater facility of working in wood than in stone, and the more brittle nature of the latter. For the rest the details enhance the similarity between the two vases, not the least conspicuous of which are the four holes symmetrically arranged round the top; moreover the flattened edge round the big opening in the back of the animal certainly implies that there was a lid in this case. As to the purpose of the holes, the same remarks apply as to the elephant vase. On the other hand the fact that wood is the material used makes it unlikely that oil or other liquids were the original contents. Finally, the striking similarity of form (allowing for the differentiation due to their completely dissimilar purposes) between this wooden hippopotamus and the predynastic hippopotamus amulets² is worth noting, as confirmation of the dating of the vases. The most salient feature common to both, however, is the deep furrow which indicates the mouth. This is also found in some of the Hathor-head amulets (see above, p. 53).

Thus all these vases are seen to give a series which started well back in the predynastic period and extended to the Second or Third Dynasty—a series of which the second and third members may actually be contemporary, whereas the third may be regarded as logically later than the second, though in nowise a direct development from it. We have seen that the first two are related by technique, and in the case of the stone palettes to some degree by form, to such typically Egyptian objects as the predynastic slate palettes and Hathor

¹ Theriomorphic vases in stone are not known after the protodynastic period, unless we are to include the alabaster toilet dishes in the shape of ducks, common in the Eighteenth Dynasty. Human figures in alabaster and serpentine are of course familiar from that time. (For the chronological distribution see Miss MURRAY, *op. cit.*, *passim*.)

² See PETRIE, *Amulets*, Pl. XL, 235 *b, c, d*. There are two good examples in the B.M., nos. 57742, 57741, exhibited (temporarily) in table-case H, Room V of the Egyptian Galleries. The head alone was retained in the Sixth to the Ninth Dynasty hippopotamus head amulets (*ibid.*, 237 *d-p*).

amulets, and that the third, even if it has broken away in part from the old form, yet follows that essentially Egyptian tradition of making receptacles, *which are to be used as such*, out of stone. It would seem therefore that we have an excellent case *prima facie* for a native Egyptian hand-craft in these animal vases. It has recently been argued¹ however with sufficient skill to convince authoritative scholars that the theriomorphic vase in Egypt as elsewhere, can be traced to an origin in North Syria. One is tempted to believe that in postulating this theory Mr. Frankfort has allowed a greater sense of conviction to express itself in his writing than he actually possesses, for his arguments even at their face value only sustain a probability in favour of his case, while he would admit (though he does not explicitly state it) that a certain probability for their Egyptian origin is inherent in the nature of the objects. The point is of sufficient importance to necessitate a careful and detailed enquiry into the soundness of his arguments.

The main steps in his exposition are as follows. Taking first Susa, we find there at the archaic period vases of alabaster in the shapes of birds and animals², with the rimmed opening on the back, showing what Frankfort reasonably calls "striking similarities" with the Egyptian material. But he quickly notes the "remarkable differences between the vessels of the two regions," *viz.* (1) the receptivity of the completely hollowed out Egyptian examples as opposed to the "creux...insignifiant, pouvant à peine contenir quelques gouttes de liquide"³ of the Susian vases, (2) the pierced lugs on the Egyptian are absent on the Susian vases, and (3) in Susa alabaster is the only stone, while in Egypt we find serpentine, breccia and other decorative stones, but never (at this period) alabaster theriomorphs. He dates the material from Egypt to the First Dynasty on the strength of the two bird vases from Hierakonpolis⁴, but virtually qualifies this by admitting that "there are pottery animal vases of this type in 'decorated ware' which can hardly be later than the beginning of the late Predynastic period⁵." His conclusion from this comparison, in which the differences rather than the similarities are stressed, is that it will be "natural to assume" an Egyptian origin for the Susian alabasters which would "then have reached Susa *via* North Syria, as an alabaster bird vase strikingly similar to the Susian specimens comes from Meskeneh." (See F., Pl. IX, Fig. 3.) "Several facts" however (but not the essential differences mentioned above apparently, since they offer no objection to the alternative proposal) "seem incompatible with this view." Let us deal with these facts.

To clear the ground, the possibility of a Cycladic origin, based on "a sheep with three⁶ cups of the well-known type hollowed out in its back..." (from one of the Aegean islands

¹ FRANKFORT, *op. cit.* (henceforward referred to as F.), 111-113, ¶ 44. Cf. p. 73.

² [JÉQUIER], *Délégation en Perse*, VII, 18-19, Figs. 10-14.

³ *Délégation*, VII, 18.

⁴ See above, p. 54, and note 1.

⁵ If he had known the breccia dove in the B.M. he would certainly have allowed an earlier date for some of the stone examples. Even so it is questionable whether some of those with which he was familiar, *e.g.*, the duck figured by him on Pl. XIX, 2, could ever have been brought down so late as the First Dynasty, especially when we remember that this example is published as predynastic (by Petrie and Miss Murray) and came from the well-known predynastic site of Naqâdah. In any case he would be the last to deny that there is a connection between his stone theriomorphs of the First Dynasty and the decorated pottery animal vases of the predynastic period. We shall see the importance of this later.

⁶ In the photograph published by Frankfort (Pl. IX, Fig. 4) only *two* cups are shown; Mr. E. T. Leeds kindly confirmed for me the fact of there being two.

and now in the Ashmolean), "and the bird-shaped vase of brown limestone" and an "oblong, triple vessel" of island marble found together in a First Dynasty grave at Abušir el-Melek¹, is repudiated for the sake of the greater cause. The islands, like Egypt, "have borrowed this type of vessel from North Syria." What is the evidence?

I. The only object from Egypt itself is the camel from Abušir el-Melek², which "certainly points to an Asiatic prototype." Asia, however, is not synonymous with North Syria, and we have the important negative evidence of the cuneiform inscriptions which do not mention the camel before the eleventh century B.C.³

Now if the camel was known in North Syria even in protodynastic times, it would have been used as the baggage animal on the caravan routes to Mesopotamia and Elam, the existence of which Mr. Frankfort implies throughout; and we should be certain to find some mention of this all-important means of transport in the innumerable business documents concerned with Syrian traffic written in the cuneiform script⁴. In other words its likeness to a camel is a fair proof that this vase did not itself come from Syria and a strong argument in favour of its prototype having come from anywhere but there. Assuming that it is the single-humped camel, its original home at this time could only have been S. Arabia, a fact which would be more happily explained by Frankfort's highly probable conclusion that the stone vase industry came into the Nile valley with a people living on the western shores of the Red Sea at the other end of the Wādi Ḥammāmāt⁵, than it is by a German scholar's rather vague suggestion that it is a relic from the earliest Semitic infiltration⁶.

¹ See p. 55 above with note 2 for the reference.

² *Ibid.*

³ On the Broken Obelisk, of Tiglath Pileser I's breeding dromedaries (RAWLINSON, *Cuneiform Inscriptions*, I, 28, 27 a). This is the two-humped "Bactrian" camel (*Ass. udru*) which appears again on the Black Obelisk of Shalmaneser III in the second half of the ninth century. They are there part of a "tribute" from Mušri, which in this context must be Egypt (in its larger sense of all the countries under Egyptian influence, perhaps here Southern Syria and Palestine). Of the other animals represented the ox, rhinoceros and oryx (*I*) are Egyptian, but the elephant, as W. M. Müller has shown in the *Zeit. Ass.*, VIII, 211, is the Indian species. Professor Olmstead's confident assertion that it is the African species (*History of Assyria*, 142) is plainly contradicted by the only relevant detail in the relief, namely, the shape and size of the ears. In depicting the camel from Mušri with two humps the artist has confused that name with the Mušri in the Median Hills (see SMITH in *Journal*, x, 110, note 4), whence Tiglath-Pileser and Shalmaneser himself received tribute, and where the "Bactrian" camel might be expected to exist. Müller's statement that it could only have been the two-humped camels which were remarkable (*op. cit.*, p. 212) cannot stand, since it assumes that the single-humped camel (*Ass. gammalu*) was already a common object among the Assyrians, whereas this type does not appear to be mentioned in their inscriptions until the end of the eighth century. (See MUSS-ARNOLT, 229.) It is, however, depicted in a relief of Shalmaneser, see KING, *The Bronze Reliefs from the Gates of Shalmaneser*, Pla. XXIII, XXIV. For these and other references to Mesopotamian authorities I am indebted to Messrs. Sidney Smith and C. J. Gadd, who have also verified the pertinent passages in the original text for me.

⁴ Smith has pointed out in *Rev. d'Ass.*, XXI, 87, that pack-asses were the regular transport animals at the time of the Cappadocian Tablets (end of the Third Millennium) in the "traffic from the north-west to Babylonia" and that they were still famous a thousand years later "when they were called 'Amorite,'" see KING, *Boundary Stones*, I, 39, ll. 17-18.⁵ It seems that camels have been used along river routes only in comparatively modern times, being confined at first when they did come into general use in Mesopotamia to the desert routes.

⁶ *F.*, p. 100 following.

⁷ *M.D.O.G.*, No. 30, Mai 1906, pp. 16, 17. "Wir werden uns das gänzliche Fehlen von Darstellungen des Kamels auf den späteren Monumenten wohl etwa so zu erklären haben, dass das Tier, von dem semitischen Bestandteil der vorgeschichtlichen Bevölkerung Ägyptens in die neue Heimat gebracht, dort frühzeitig ausgestorben ist."

II. "A remarkable vase in the shape of a quadruped, again with a rimmed opening in the back" from Keul Tepe in Cappadocia¹. Now the tablets found at Keul Tepe are dated to about 2300 B.C. on the very earliest reckoning, so that this vase may be assumed to be somewhere about that time—i.e. 1000 years after the end and perhaps 2000 after the beginning of the stone theriomorph period in Egypt. Nor is Cappadocia the same as North Syria; but we are asked to see a North Syrian origin for the Cappadocian vase which thus serves to show the continuity of this type in the region of North West Asia. The important point for us, however, is the object itself; for there is no resemblance to anything Egyptian beyond the "rimmed opening" which again is in itself a far cry from the Egyptian stone or pottery rim. Moreover there is a hole at the end of the snout, a detail which on Frankfort's own showing² should be of fundamental importance in distinguishing types. Together with this vase from Keul Tepe we are to take "the silver stag from Mycenae" which "points to Anatolia by its origin." Its date, however, at the most generous estimate cannot be earlier than 1700 (beginning of M.M. III) and is more probably about 1600 to 1500. And though the use of silver (it was an alloy of two parts to one of lead³) may point to an Anatolian mine, the stag more probably came from a Mycenaean workshop. The balance is therefore at least equally in favour of an indigenous origin for the animal-shaped vase. Moreover what Schliemann calls the "mouthpiece in the shape of a funnel⁴," which is the important detail in favour of the argument, is the only possible device (of such an elementary nature) which would make the vase pour effectively.

III. The sudden appearance in Crete "in the Middle Bronze Age" of the bull-shaped vases of "base-ring" ware which with the rest of that ware "are considered to be introduced from Syria⁵." The date here is if anything a little later than that of the silver stag, corre-

¹ MEYER, *Reich und Kultur der Chetiter*, PL. V. The vase is of pottery.

² F., p. 111, note 4.

³ H. SCHLIEMANN, *Mycenae und Tiryns*, p. 257.

⁴ *Ibid.*, with Fig. 376.

⁵ I cannot find sufficient evidence for this widely held opinion. I am, however, under a considerable obligation to Mr. Einar Gjerstad for the following answers to my enquiries, and for his permission to print them. The grounds for maintaining a Syrian origin for the base-ring ware seem to be these: I. "...a few base-ring shapes actually imitate the foreign (probably North Syrian) types"; i.e. "(1) long spindle-shaped flasks, (2) lentoid pilgrim bottles." These two types are familiar to us in the wheel-made red polished pottery found on Egyptian and Palestinian sites. II. This same "North Syrian pottery is found imported in Cyprus." The important facts against a Syrian origin are these: (1) The base-ring ware "is hand-made but all contemporary Syrian pottery is wheel-made." (2) It is "imitated by the Syrian potters (in Gezer many specimens of imported genuine base-ring ware were found together with occasional wheel-made imitations in Palestinian clay)." (3) "Most of the typical shapes are developed out of old Cypriote types." There can scarcely be any doubt therefore that the base-ring ware found in Cyprus was also made there. Mr. Gjerstad goes further and says that "the base-ring ware is Cypriote." The only objection to this is, as Mr. F. N. Pryce of the Department of Greek and Roman Antiquities has pointed out to me, that we then have two contemporary types of pottery in Cyprus, closely related to each other but differing in a number of essentials; twin developments from a single tradition, and both displaying native techniques. Of these two types one has a more barbaric character than the other, and it is for the more civilized ware that a foreign origin, or influence, is claimed. On the other hand a cursory survey of this ware will be sufficient to show that the greater number of foreign types are not Syrian but Anatolian in appearance, and of these an obvious example is the "bull-shaped vase" with its strong suggestion of a leathern model and reminiscence of the bull cults of Anatolia. Now if the various types of base-ring ware all share a single technique, which is said to be foreign, it clearly cannot come from two different places. We must either sacrifice the Syrian case, or abandon the idea of a foreign origin and admit that the ware is native Cypriote.

sponding to the Eighteenth Dynasty. It should be noted too that in addition to the spout this type of vase has a small handle, one end of which comes down to join the spout.

IV. "A few theriomorphic vases" found in Palestine (by Macalister at Gezer)¹ whose significance is that they occur at the period of greatest contact between Egypt and North Syria, i.e. when

V. "vases appear in the shape of animals and human beings" of the same ware "as the red polished flasks, whose North Syrian origin is well established"; i.e. again in the Eighteenth Dynasty. Although, as Mr. Frankfort says, this pottery was sometimes imitated by the Egyptians, yet the bulk of it, though obviously made in the form of Egyptian figures and therefore presumably for the Egyptian market, was actually of foreign manufacture, and there can be no question that the *human* figures either were imported from, or in the case of imitations originated in, Syria or Palestine. *But no animal forms are known in this pottery nor in its imitations.* He clearly has in mind the calf vase (whose spout is on the top of the head, not on the back) and hedgehog vase (where the low spout is right in front and tilted forward with a small handle attached) found by Mace at El-Amrah.² They are not, however, of this red polished ware, and Frankfort himself remarks in a note that "it is curious to observe with him [Professor J. L. Myres] the Aegean features in these Syrian products...³" Now the ware of the calf vase at any rate is admitted to be native Egyptian. Are we then justified, remembering the Aegean characteristics, in assuming that the vases are Syrian products?

VI. "The apparently most ancient *rhyta*" come from Anatolia. The objects on which this statement is based are: (1) the clay bull's head *rhyton* published by Woolley in his *Hittite Burial Customs*⁴ where he justly claims that it "shows a striking resemblance to Cretan work of Late Minoan I." It is difficult then to see why he should have assigned it "almost certainly" to his Second Period, i.e. that of the "champagne-glass" vases which, according to his dating, must be well before 1750 B.C. (2) "Apparently" a pottery bull's head found at Keramo in Caria and published by M. Pottier⁵, in whose opinion it is a piece admittedly of archaic style, but which "on pourrait faire descendre jusqu'à l'époque classique du VI^e siècle." The value of (2) is therefore automatically discounted by the much earlier date of (1). This, however, in its turn must yield precedence of date, for the earliest *rhyta* are the complete pottery bulls with acrobatic figures in relief from the *tholoi* of the Messarà discovered by Dr. Xanthoudides⁶ from which the head-*rhyta* were evolved by the process of eliminating all but the essentially practical part of the vessel. Their date is M.M. I. They are ritual libation vessels and differ from the theriomorphic vases we are discussing in having besides the large aperture in the top a smaller one in the snout of the beast for pouring. Finally we may perhaps go back still further for the original of this form of vessel to the Early Minoan jugs with side spouts (E.M. I and III)⁷ which are perhaps

¹ Somewhat discounted by Mr. Frankfort on the grounds of their uncertain date.

² *El Amrah and Abydos*, 72 ff. and Pls. XLVIII and L. See also Frankfort's reference, *ad loc.* (p. 112, note 6), to MYRES' discussion in *El Amrah* where the foreign character of the vases is undoubtedly proved.

³ MYRES, *ibid.*

⁴ *L.A.A.A.*, VI, 90, Pl. XXa.

⁵ *Bulletin de Correspondance Hellénique*, XXXI, 255, Pl. XXIII, No. 2.

⁶ EVANS, *Palace of Minos*, I, 189, Fig. 137, and XANTHOUIDES, *The Vaulted Tombs of Messarà*, transl. by J. P. Droop, Pl. XXVIII, No. 4126.

⁷ EVANS, *Palace of Minos*, pp. 108 ff., Fig. 76; FORSDYKE, *Cat. of Gk. and Etruscan Vases, etc.*, Vol. I, Part I, *Prehist. Aeg. Pottery*, XXXIII, 75, Pl. VI.

comparable with, but in no sense borrowed from, the contemporary Yortan ware, whose obvious debt to leathern models also led to theriomorphic shapes, obtained "not by the actual modelling of an animal, but by exploiting the fortuitous resemblance of the vases to birds or beasts¹." One might add "and of human beings" (see FORSDYKE, *op. cit.*, Pl. II, A 68), and compare with these the anthropomorphic pottery vase from Assur, published by ANDRAE, *Die archaischen Ishtar-Tempel in Assur*, which is of the early Sumerian period.

VII. Possibly "the few theriomorphic vases from Troja" which "present rather a different aspect." The two objects noticed² are excellent examples of the theriomorphic tendency in the Yortan pottery discussed above, with which type the early Trojan pottery is classed³.

VIII. "Pottery birds and four-legged animals of the same type as our vases were found by M. de Morgan [in the cemetery at Djönü containing bronze and iron implements] in the South Eastern Caucasus⁴." Frankfort admits that they have "a late and debased look" but doubts whether this kind of vessel "caractérise la période de fer d'une manière absolue" (*Mission scientifique en Perse*, IV, 113) on the grounds of the published evidence being insufficient. The opening in the back is the only detail in which they resemble Egyptian theriomorphs. Their provenance is even less connected with North Syria than is Anatolia, and unless the presence of iron implements in the graves is to be ignored M. de Morgan was justified in giving the cemeteries a date which is considerably later than the Eighteenth Dynasty.

The remarkable black hawk vase of the typical Hyksos "punctured" ware in the British Museum, No. 17046 (Pl. XIII, Fig. 5)⁵, might well have been included as an important piece of the evidence. The spout in this case is on the top of the head and has a small handle attached to it. The vase is $3\frac{3}{4}$ ins. long from breast to tail, and $3\frac{1}{2}$ ins. high. Its date would place it immediately before the formidable mass of evidence Nos. III-V above, coming from the Eighteenth Dynasty, and thus offer another link in the connection with the pre-dynastic period which is required to support his thesis. How much of this vase is due to Syrian and how much to Egyptian influence will be discussed below (p. 68).

The foregoing analysis shows clearly that the evidence divides itself into three stages, the chronological and territorial continuity of which is insufficient to justify the logical connection which is seen in it. The first stage consists of the two isolated instances I and II, above (the camel and vase from Keul Tepe), isolated in the sense that they have no historical or chronological connection with each other or with the material which follows, and occur at very much earlier dates. Moreover, as we have seen, I is valid only as an argument against Mr. Frankfort's thesis. The second stage gives us the solid evidence in III-V, all dated to the Eighteenth Dynasty (and, if we include the Hyksos vase, at most the 200 years immediately preceding 1580), which is the basis of the whole thesis. The argument so far then is to the effect that the *earlier* vases, similar to those from Syria in

¹ FORSDYKE, *op. cit.*, XII.

² HUB. SCHMIDT, *Heinrich Schliemann's Samml. Trojan. Alterth.*, Nos. 607, 608.

³ FORSDYKE, *op. cit.*, XIII.

⁴ F., Pl. VIII, 5 and 6.

⁵ First published by HALL, *The Oldest Civilisation of Greece*, p. 69, Fig. 30; also MURRAY, *op. cit.*, Pl. XXV, 71, where it is erroneously assigned (p. 45) to the New Kingdom and described as "dark red" polished pottery.

the *Eighteenth Dynasty*, are themselves of Syrian origin. The third stage includes the remaining examples VI-VIII, admittedly of less reliable value and of various dates, from the Eighteenth Dynasty to the sixth century, with the exception of the much earlier Trojan vases (VII), and all from places well outside the most generous limits which could be given to North Syria. Here again the argument, though independent of the former, is from the Syrian vases of the Eighteenth Dynasty to the similar ones occurring later and elsewhere. Now although the second argument *may* be justifiable, the first is patently fallacious. The only proposition which might be legitimately deduced from these two groups of facts is that the early vases influenced those of the Eighteenth Dynasty¹, in which case the argument sets in exactly the opposite direction to that proposed by Mr. Frankfort. Thus he has strengthened the generally accepted theory of a Syrian or Palestinian² origin for Egyptian figure-vases in the *Eighteenth Dynasty*³. For the *theriomorphic* examples of these there is no direct evidence of a Syrian origin; on the contrary it is strongly on the side of Egypt as I shall hope to show. As for the earlier periods nothing has been advanced in the body of evidence which we have discussed but arguments against it.

We have now to return to the alabaster bird vase from Meskineh, which though undated cannot be lightly put aside. Its very strong resemblance to the alabaster theriomorphic vases from Susa II (the archaic period) gives it considerable importance, the more so because Mr. Frankfort is thereby encouraged to assume an early date (roughly equivalent to Egyptian protodynastic) for the Syrian example. There are good reasons for doubting this assumption. In the first place the similarity with the Susian bird vases breaks down at the most vital point. For the Meskineh bird "is hollowed out to the bottom" and the cavity is enlarged in all directions; "the attempt to get back into the tail not very successful but in the breast quite neatly finished"⁴. Thus the bird, though not so thoroughly scooped out as the Egyptian vases, resembles them in so far as it was evidently meant to be used as a vase, while the Susian theriomorphs with their very small cavities "hardly able to contain a few drops"⁵ must have served a totally different purpose. But when a people borrows from another's culture it does so primarily for a practical purpose, and in doing so it usually retains, as near as may be, the original design of the object borrowed; this, however, is of secondary importance. Thus the Egyptian living in Akhetaten imitated in his own clay the "Cypriote" vases (*i.e.* base-ring ware, see above, p. 59) clearly that they might be used for the same purposes (*i.e.* to contain oil) as the originals of which also he had examples, taking care to make them in precisely the same shape, and adding in paint a coarse imitation of the original decoration. This illustrates both points: one might add

¹ As might indeed be the case if Foradyke is right in recognising a theriomorphic tendency in *Anatolia* which is intrusive elsewhere (*op. cit.*, XII).

² Whether we can justly narrow this range of country to North Syria is not yet clear from the evidence.

³ In spite of our highly organized interchange of trade there does not seem to be an exact parallel to-day to this unique phenomenon in the history of ancient economics. It is almost incredible that a comparatively backward country should *invent* a specially artificial type of pot solely for export to another and more civilised people. Yet all the known figure vases of this ware represent Egyptian figures.

⁴ The two quotations are from Mr. E. T. Leeds who very kindly examined the vase for me in the Ashmolean.

⁵ F., III. See also p. 57, note 3, above. Yet Mr. Frankfort speaks of the Meskineh vase as "an alabaster bird vase...which beyond any possible doubt belongs to the same series as the Susian examples." (Italics mine.) F., 73.

a third, that the adaptation of the original to indigenous decorative designs or characteristics requires a considerable time.

Secondly, "alabaster" is not native to Syria. The material from which the Meskineh bird is made is not the fine, smooth-grained alabaster (calcite) which is usually found in Egypt, but the coarser aragonite. This stone is found in the Persian hills, and it is probable that the bird was made of Persian aragonite, although as we have seen it is not connected with the Susian bird vases of the same material which was almost certainly obtained from that source. Clearly then the assumption is that the Meskineh and the Susian vases were made at very different periods, since, though their materials come from the same quarries, yet their forms imply that they know nothing of each other. On the other hand we do find in North Syria at a later date alabaster vases in the shape of human figures of exactly the type found in the red polished pottery (see above, p. 60) and these are made of this same aragonite. We have seen, too, that the Meskineh bird is hollowed out somewhat after the fashion of the Egyptian stone vases. It is possible that to this extent it is borrowed from Egypt. With these considerations before us we should therefore expect it to be dated rather to the early part of the Eighteenth Dynasty than to the protodynastic period. As evidence then for the North Syrian origin of Egyptian theriomorphic vases it must be considered of equal value with the points III-V cited above and of no more.

Thirdly, if the theriomorphic vase originated in North Syria we should expect to find it in pottery, the natural medium of a country which lacks stone suitable for carving. But there is no example in pottery before the Hyksos period. On the other hand pottery examples abound outside North Syria from the predynastic period onwards—in Susa, Cappadocia and Egypt itself, etc.

We have seen that the internal evidence for a North Syrian origin of the theriomorphs amounts at the most generous estimate to an improbability. Let us now consider the negative evidence—or, as I should prefer to call it, the positive evidence for an Egyptian origin of the Egyptian vases. The important facts have already been suggested in the description of the three stone vases in the British Museum. They are as follows:

I. The very early date of some of the material, *e.g.* B.M. 35306 and the duck from Nakâdah¹, proves that the theriomorphic vase was known in Egypt long before dynastic times, *i.e.* long before the earliest date assumed by Frankfort for the Meskineh vase. Moreover pottery bird- and other animal-vases² are found in Egypt from the predynastic period, some painted to imitate the stone ware and with imitation pierced lugs, and therefore probably to be dated close after the earliest stone vases; and all are dated by Petrie to the beginning of the late predynastic period³. In almost every case the rim is preserved round the opening at the back and the animals copied in pottery are the same as those copied in stone; so that remembering also the actual imitation of stone ware we can have no doubt of the close connection between the two. Finally, I am inclined to believe that the stone vases came first since we find the natural colouring of the breccia, etc., being copied in the painted pottery⁴; and if that is so it is still less likely that the Egyptians took the idea of

¹ Pl. XII, 81; MURRAY, *op. cit.*, Pl. XXIII, 33.

² MURRAY, *op. cit.*, Pls. XXII, XXIII *pass.*

³ *Nagada*, 37.

⁴ In a discussion of the whole question Mr. Frankfort showed me that the argument for the priority of the stone based on the pottery imitations is not conclusive. But I think he would allow me the weight of probability.

the theriomorph from North Syria where the prototype as we have seen would have been of pottery. Egypt, making pottery long before her stone cutters appeared from the Red Sea, would surely copy a new pottery form *in pottery*, not directly in stone; that would come later with experience won by working in the easier medium¹.

II. The animals represented are all known, or believed, to have been native to Egypt in predynastic times, *e.g.*, duck (most of the other birds are not sufficiently natural to be identified, but the duck is by far the commonest bird represented), dove, vulture, frog, hedgehog, hippopotamus, fish (probably one of the *Tilapia*), and tortoise; the elephant and the camel are the only two exceptions, and these as we have seen are represented in an entirely different technique and form from the rest of the vases we are discussing. This difference of form argues again a different purpose, and I suggest that the two examples described above are objects with a special religious use in some way connected with the fact that they represent foreign animals. More than that we cannot say in the absence of further data.

III. The technique of the inlaid eye, the pierced lug and the rim relate the stone bird and animal vases very closely to the ordinary stone vases², in which the eye again is the same as that found on the slate palettes and the Hathor amulets. The slate palettes, too, include as their models some of the animals most commonly represented by the stone vases. Thus these vessels are seen to be akin to three of the most familiar and most characteristic classes of objects from predynastic burials.

IV. The occurrence throughout Egyptian history of theriomorphic vases with rimmed holes in the back made of Egyptian clay and in the typical Egyptian technique (see MURRAY, *op. cit.*, Pls. XXIII-XXV; and here Pl. XIII, Fig. 6 and Pl. XIV, Figs. 1-6, described below). The only period during that history when we can definitely say that the vases are foreign (*i.e.* either importations from Syria or showing influence from that country or of Aegean culture) is from the time of the Hyksos to the early Nineteenth Dynasty. Finally the very great majority of vases known from that comparatively short space of time are not *theriomorphic* but *anthropomorphic*, whereas before that time vases in the shape of human figures are comparatively rare, and after it the proportion of the two classes is about equal.

On Pl. XIII, Fig. 6 and Pl. XIV, Figs. 1-6 are published (for the first time)³ seven theriomorphic pottery vases in the B.M. having a rimmed opening in the back, which are not to be found in MURRAY, *op. cit.*⁴

Pl. XIII, Fig. 6, B.M. 54365. Length from beak to tail $7\frac{1}{4}$ ins., height 4 ins. Acquired by the Museum in 1919. Provenance unknown. A vessel roughly shaped to suggest a goose with a large splaying cup in the middle of the back for filling, and wide opening in the head for pouring. Thin, light red pottery with smooth finish. The general effect of the pottery, with the splayed rim, indicates the Eleventh Dynasty as the probable date; this is an important addition to the evidence for the rim on theriomorphic vases during the periods after the protodynastic and before the Hyksos, in Egypt.

Pl. XIV, Figs. 1, 6, B.M. 38436-7, were both acquired in 1875; the provenance of the former is unknown; the latter, which was given by the Rev. Greville Chester, is said to have

¹ See F., pp. 99 ff.

² So F., 113.

³ The following are noted (but not described) by Budge in the *Guide to the Fourth, Fifth and Sixth Eg. Rooms, etc.*, 1922, pp. 261-2, Nos. 38436, 15475, 22410.

⁴ Those published by her are B.M. Nos. 17046, 29668, 24410 (Pl. XXV, Nos. 71, 72 and 74 respectively).



Pottery vases in the British Museum, representing (1) dove, (2) hedgehog, (3) fish (B.M. 5,116), (4, 5) cocks, (6) unknown bird.

Scales:—(1) c. $\frac{1}{4}$, (2) c. $\frac{1}{2}$, (3) c. $\frac{1}{4}$, (4) c. $\frac{1}{2}$, (5) c. $\frac{1}{4}$, (6) c. $\frac{1}{2}$.



come from the tombs of the 'Asāsif at Thebes. Fig. 1 (length from beak to tail $7\frac{1}{2}$ ins., height to top of head $5\frac{1}{2}$ ins.) is a vase made in realistic imitation of a dove, with a small spout in the back and a small hole in the beak, which is slightly elongated to facilitate pouring. Two spots of clay have been added as eyes and the body shows an unusual technique in that it is torpedo-shaped, having been turned on the wheel so that a *vertical* section would present a perfect circle. At the narrow end the vertical section has been finished with a low rim, and a tail, pinched out horizontally, has been added to this. Two small wings completed the bird, but the left-hand one has since been broken off. Pink, coarse pottery with light slip. The date is very uncertain; possibly Twelfth Dynasty, certainly not earlier, and if later probably Roman. Fig. 6 (length and height as before— $9\frac{1}{2}$ ins. by $4\frac{1}{2}$ ins.) is a similar vessel representing a bird whose exact nature is not clear. It resembles Fig. 1 in its principal points—rimmed opening (the rim since broken off), hole in beak, spotted eyes, small wings added at the finish, but lacks the torpedo body and has a much smaller tail. This again is pinched out horizontally and is incised to represent tail feathers. There are other groups of incised marks on either side of the back. The bird has three short legs, two in front and one behind—the latter clearly to enable it to stand upright. Coarse drab pottery with greenish slip. Date again uncertain: perhaps belonging to the second intermediate period—Thirteenth Dynasty—otherwise certainly Roman.

Fig. 2, length $3\frac{1}{2}$ ins., height $4\frac{1}{2}$ ins., B.M. 15475, given by the Henry Christy Trustees in 1879, originally from Lord Valentia's collection, is a return to the "Syrianising" type (by this time the common property of the Mediterranean world but not *necessarily* derived by it from Syria) in the form of a hedgehog, beautifully worked out in every detail. It has a narrow spout in the back with a handle, very suggestive of metal-work, attached to it on the shoulder. There is no other opening. The animal, whose feet are just indicated in relief, squats on a rectangular stand, which is also hollow. The depth of the vase was rendered possible by making it in two halves, the central line of their joining being clearly visible. Made of black pottery of the Roman period.

Fig. 3, B.M. 5116, length 6 ins., height $3\frac{1}{2}$ ins., has no history, but it was already in the Museum in 1834. It is a hollow pottery fish with a small hole in the lip to which a spout had originally been added, though this is now lost. The head is pinched in, a nick represents the open mouth (there is no hole), and two large spots of clay the eyes. Red clay baked black right through, with red polished slip partly blackened by fire(?). Date possibly Eighteenth Dynasty, possibly late.

The two remaining vases, Figs. 4 and 5, are somewhat similar. Fig. 4, B.M. 22410 ($6\frac{1}{2}$ ins. \times $6\frac{1}{2}$ ins.), was given to the Museum in 1885 by the Egypt Exploration Fund and came from Petrie's excavations at Tanis (House 44). It is therefore Roman. It is a vase in the shape of a cock, with a tall spout in the back, a handle attached at either side and coming down to the shoulder. There is no other opening except in the tail and that is due to the tip having been broken off. It stands on a low ring-base. Buff pottery with light slip decorated with red paint.

Fig. 5, B.M. 48316, length from breast to tail $3\frac{1}{2}$ ins., height $4\frac{1}{2}$ ins., was acquired in 1874 from the Rev. Greville Chester with a large number of other objects most of which were known to have come from Tell el-Yahûdiyah, the Fayyûm and Damanhûr. In form very similar to the preceding one, this vase differs essentially in having a hole in the beak. It stands on a deep ring-base, and the tail has been pinched out into a wide horizontal fan-tail. The light buff pottery is only less coarse than the workmanship. A deep crease

is still visible between the upper and lower halves of the tail and where these are more tightly pressed together the finger-prints are still obvious. These are to be seen at all the joins (*e.g.* where the handle meets the spout and the shoulder) and in a number of other places. It is decorated with a Coptic design in dark red paint, and to this period it may well be assigned¹.

These are, I think, the chief features of the internal evidence for an Egyptian origin, and in the absence of any conclusive evidence to the contrary they present a convincing case. Indeed it may be asked why we should expect these stone theriomorphs found in Egyptian graves with Egyptian objects to be anything but indigenous. For there is nothing in the composition of a stone bird-vase foreign to the culture of Egypt. The answer lies simply in the fact that stone vases in the shapes of animals are found outside Egypt which resemble the Egyptian objects in having a rimmed hole in the back. It is therefore assumed that there must have been direct influence of the vases of one district on the rest, or indirectly through each other. North Syria was the most central of the districts in question. Moreover it is known to have been in contact with Egypt at least as early as the First Dynasty², and is further considered by Frankfort to have been influencing Elam at an even earlier date³. In spite of its being able to produce only one theriomorphic vase—and that undated—before the Hyksos period, it is therefore forced into the position of originator against the evidence. The fundamental weakness of the argument lies, however, not in its development but in the initial assumption *that the similarity of design necessitates a connexion*.

It would be at once admitted that it is natural to all peoples at early and late stages of their civilization to make vases in the shapes of animals. The important characteristic in our examples is the hole in the back with a rim of one kind or another. Now the obvious place to have the hole (for filling and emptying) in a vase which is intended to hold any quantity at all is in the top, and both these functions are assisted by a rim of some sort round the hole. In other words, if once the idea of making a vase in the shape of an animal has occurred to a number of different people, there is every chance that they will each make something on the lines of the Egyptian predynastic theriomorph and that their vases will closely resemble each other⁴. To see this point illustrated one has only to walk down the Greek and Roman Galleries of the British Museum where from almost every part of the classical world and widely separated periods examples of theriomorphic vases with a rimmed hole in the back are to be found⁵. But in case some should even here be

¹ Two unpublished pottery vases in the Ashmolean should be added to this list; a *rhyton* with head of a bull (?) of the Eighteenth Dynasty. It is described as coming from "Grave 109, Saft el-Henna (Goshen)" in 1906, and was presented by the British School of Archaeology in Egypt, but I can find no reference to it in Petrie's publication of that cemetery in *Hyksos and Israelite Cities*. The other is an ibex or goat lying down; from Kan el-Kebir, grave 1920. Given by the B.S.A. 1924. It is a pinky-buff ware of the Eighteenth Dynasty.

² F., *op. cit.*, 104 ff.

³ F., pp. 70, 73, etc.

⁴ Of course if we find a hollowed out theriomorphic vase with pierced lugs at the side and inlaid eyes besides the characteristic rimmed opening, we should be very strongly persuaded that such an object was connected with Egyptian vases if it came from any district at all within reach of Egypt at that time.

⁵ *E.g.*, in the sub-Mycenaean ware from Cyprus, and seventh and sixth century wares from Sardinia; in *aryballoi* from Cameiros and Rhodes; *askoi*, *lekkythoi* and *Lymbia* in the black Italian fabrics of the fourth to second centuries, and in the glazed ware from Tanagra of the late period. One may also notice here the fragment of an aragonite vase in the shape of a ram, found at Ur of the Chaldees by the joint





1



2



3



4



5

Theriomorphic vessels from (1, 3) Peru, (2) Bolivian-Peruvian Highlands, (4, 5) Mexico.

Scales:—(1) $\frac{1}{2}$, (2) $\frac{1}{4}$, (3) c. $\frac{1}{2}$, (4) $\frac{1}{2}$, (5) c. $\frac{1}{2}$.

frightened of the shadow of North Syria, let them go a little further afield. In the cases of the Ethnological Department they will find convincing evidence from the two Americas and South and Central Africa. Theriomorphic vases are as common in the New World as in the Old. Their dates are far later than those of the vases we have been discussing, but in most cases they are "Pre-discovery," and in all, except a few modern pipe bowls from Central and South Africa, they are, as far as the evidence shows, indigenous. On Pls. XV and XVI are shown examples of the best illustrations of this point, for permission to publish which I have to thank Mr. T. A. Joyce, Deputy-Keeper in charge of the Ethnographical Department¹.

The vases figured, with their provenances and dates, are as follows:

- Pl. XV, Fig. 1, Registration No. 1909, 12-18, 70. Length $9\frac{1}{4}$ ins., height $6\frac{1}{2}$ ins. Painted pottery bird vessel for holding water. From Peru: Proto-Chimu period, Truxillo region, 100 B.C.—300 A.D. The complicated handle and spout are the product of a country in which water is very scarce. The small opening to the air allows as little evaporation as possible, while the divided stem of the handle enables the air to pass in (or out) at one passage while the water is poured out (or in) at the other.
- Pl. XV, Fig. 2, Reg. No. 40, 12-17, 25. Length $4\frac{1}{2}$ ins., height $2\frac{1}{2}$ ins. Polished red pottery duck. Bolivian-Peruvian Highlands. Inca period (before 1400 A.D.).
- Pl. XV, Fig. 3, Reg. No. 1907, 3-19, 666. Length $4\frac{1}{2}$ ins., height $2\frac{1}{8}$ ins. Black stone alpaca. Peruvian Highlands. Inca period. This pot is significant for the *absence* of the rim, which, as is suggested above (p. 66), is essential if the vase is to contain liquids of any sort. It was buried in the fields with coca leaves inside as a fertility charm.
- Pl. XV, Fig. 4, Reg. No. 25, 12-10, 14. Length $5\frac{1}{2}$ ins., height $4\frac{3}{8}$ ins. Alabaster pot in the shape of a cock. Mexico: Totonac, Vera Cruz. Probably pre-Aztec.
- Pl. XV, Fig. 5, Reg. No. 44, 7-20, 973. Length $4\frac{1}{2}$ ins., height $3\frac{3}{8}$ ins. Glazed pottery bird vase. Mexico: Totonac—Island of Sacrificios, Vera Cruz. Pre-Aztec.
- Pl. XVI, Fig. 4, Reg. No. 66, 7-13, 18. Length 5 ins., height 4 ins. Pottery vessel in the form of a monkey. Nicaragua—Pre-conquest.
- Pl. XVI, Fig. 2, Reg. No. 1914, 9-25, 1. Length $10\frac{3}{4}$ ins., height $3\frac{3}{8}$ ins. Painted pottery alligator. Talamancan (Chiriqui), Costa Rica—Panama. Pre-conquest.
- Pl. XVI, Fig. 5, Reg. No. 9856. Length $5\frac{1}{2}$ ins., height 3 ins. Steatite pipe (given by A. W. Franks, Esq.) in the form of a bird. North America; Mississippi Mounds. Pre-discovery.
- Pl. XVI, Fig. 3, Reg. No. 1922, 4-13, 126. Length 4 ins., height $3\frac{3}{4}$ ins. Black pottery pipe, representing an antelope. Northern Rhodesia, Ba-ila tribe (Mashukolumbure). Modern.

As a last example of a theriomorphic vessel with rimmed hole in the back we have a Ming vase in the form of an elephant (Pl. XVI, Fig. 1) in the possession of Miss Mary C. Jonas, who very kindly had it photographed for me and allowed me to publish it. Its length is $5\frac{1}{2}$ ins. and height $4\frac{1}{2}$ ins.

Mr. Frankfort is no "diffusionist" and the most uncompromising of that school would not care to link up all the theriomorphic vases enumerated in the course of this article.

expedition of the British Museum and the University Museum, Philadelphia, in 1922-3, now exhibited in the B.M., no. 116460, and probably dated to about the seventh century B.C.

¹ I am also indebted to Mr. Joyce for the information regarding these vases which is not to be found on their labels.

It may be argued, however, that between the early stone vases of Egypt and even the most ancient of Peruvian theriomorphic vases there is a large gap in time. That does not affect the question of the possibility or rather the inevitability of any people inventing the theriomorphic vase for itself from its own genius, and at the same time on the lines of those from the early Nile culture. Moreover it may be answered by a reminder that the gap between predynastic Egypt and North Syria of the Hyksos is also a great one in time—too great at all events to be spanned by a single *undated* vase made of a foreign material. Finally, since we have found that this type of vase may occur almost anywhere without exterior prompting, there is no longer *need* to look for an origin beyond itself either for Egyptian or Syrian or Cycladic or Susian vases. There is no *need* for connexion: but that there *may* have been connexion where there is evidence for such cannot for a moment be denied. Not all peoples develop simultaneously and foreign influence may bring a new form which would have been evolved later from within.

The bulk of this attempt to establish an Egyptian claim for the origin of the earliest theriomorphs has, I am afraid, been destructive, and it seems almost obligatory that one should offer some positive reconstruction of the later evidence in compensation. The opportunity for this seems to be clearly indicated in the Hyksos hawk vase (Pl. XIII, Fig. 5, above). This little pottery bird has been strangely overlooked in spite of its publication by Hall as early as 1901; yet the fact that it can be definitely assigned (by the very special nature of the ware) to the Hyksos, and its unique form for that period, should alone have attracted the attention of archaeologists. The very narrow passage through the funnel—there is no other opening—must have made it difficult to pour out its contents which we may therefore assume to have been of some value. The unusual form of the vase together with its spout, so clearly designed to prevent extravagance or waste, suggests strongly that it was a ceremonial object, probably part of the temple service. When, next, we consider the importance of the hawk in Egypt with its double significances of divinity and royalty, this theory of the vase's use might be restricted to a ritual performed by the king. More important conclusions, however, are to be drawn from the hawk. The Hyksos had already been in Egypt long enough to absorb some of the religion of the country when they made this vase, since they chose as subject the hawk, the special significance of which was peculiar to Egypt. Yet, while they were still making their own native pottery, there is no other example of an animal vase known in Hyksos pottery. The evidence there is against a North Syrian origin for that type of vase. When, in addition, we remember the tendency towards *human* and the absence of animal figures in the one prolific period of Syrian pottery, the known existence of animal vases in Egypt from much earlier times, and the two early Eighteenth Dynasty animal figures (p. 60 above) from Abydos, showing foreign influence, but one at least of native pottery, the evidence is very strongly in favour of the assumption that the animal or at least the bird vase was natural to Egypt. The Hyksos, however, in adapting their pottery to this new form retained an important element from Syria, which they did not find in Egypt but which is found from that time onward, especially in the human figures of alabaster, serpentine and pottery of the Eighteenth Dynasty *and* in one of the two animal vases (the hedgehog) from Abydos—namely the small handle attached to the spout and shoulder. This then is the real contribution from Syria¹—or perhaps North Syria, we cannot yet say—and we find it in classical times and

¹ Or perhaps indirectly from Cyprus *via* Syria, for as Mr. Gjerstad has pointed out to me, the handle is an essentially Cypriote feature, being found both in Middle and Early Cypriote pottery.



1



2



3



4



5

Theriomorphic vessels from (1) China, (2) Costa Rica,
(3) Northern Rhodesia (modern), (4) Nicaragua,
(5) North America (Mississippi Mounds).

Scales :—(1) c. $\frac{1}{2}$, (2) c. $\frac{1}{2}$, (3) $\frac{1}{2}$, (4) c. $\frac{1}{2}$, (5) $\frac{1}{2}$.

later cropping up all over the Mediterranean world. It is this handle, often doubled (as here), that we have on the little Coptic cock (Pl. XIV, Fig. 5), though the vase is of an essentially different nature from that of the Eighteenth Dynasty in that it has a hole in the beak besides one in the back. How far the *large* handle on Egyptian pottery vases which is generally stated to be Syrian in origin is really indebted to foreign influence there is not space to discuss here. It is curious, however, that a people who could invent a lug on the side of a stone vase, and pierce it, should require to have suggested to them the simple device of adding a bent strip of clay to a pot.



TWO EIGHTEENTH DYNASTY LETTERS PAPYRUS LOUVRE 3230

By T. ERIC PEET

With Plate XVII.

The papyrus numbered 3230 in the Louvre consists of two pieces gummed down on to mummy wrapping and therefore presumably uninscribed on the verso. The larger piece measures 16.6 cm. in breadth by 13.3 in height, and the smaller 15.5 by 10.0. In both cases the fibres run horizontally on the inscribed face.

The papyrus was published no fewer than 43 years ago by Maspero¹, whose genius enabled him to produce not only an amazingly clever transcription for that time, but also a very fair translation of the lower piece, though, as will be seen later, an incorrect reading misled him as to the bearing of the document. This lower piece has lately been republished by Spiegelberg², who, however, worked at a disadvantage, not having the original document before him and being forced to depend on the very bad facsimile published by Maspero.

In the summer of 1925 I made a very careful collation of the whole papyrus in the Louvre. Its main interest lies in its date. The grammar and phraseology are distinctly tinged with the idiom of Late Egyptian, and point clearly to the Eighteenth Dynasty. This dating is borne out by the neat script with its strong reminiscences of Middle Kingdom forms and its entire lack of the abbreviations and almost senseless strokes and ligatures of a Nineteenth or Twentieth Dynasty letter hand. The two pieces are by different hands, or by the same hand at different periods in life, for despite a superficial similarity there are very marked divergences, as may be seen, for instance, in the forms of  and  even in Maspero's facsimile.




Spiegelberg has fixed the date even further by pointing out that by the scribe "Aahmōse of Peniati" must be meant the man described on a Louvre palette (E. 3212) as "The scribe Aahmōse, lieutenant of Peniati, director of works of Hermonthis." This Peniati lived during the reigns of Amenophis I, Tuthmosis I and II, Hatshepsut and Tuthmosis III. The letters may therefore be ascribed to the first half of the Eighteenth Dynasty. See Pl. XVII.

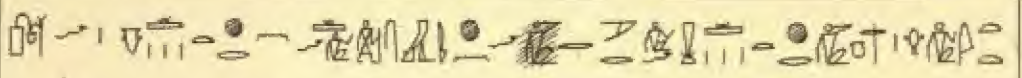
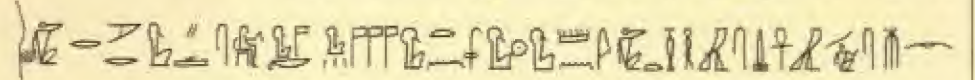

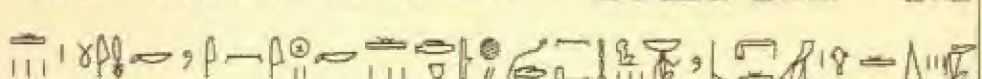
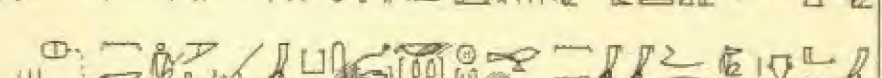
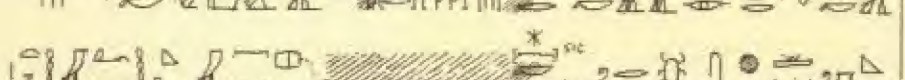
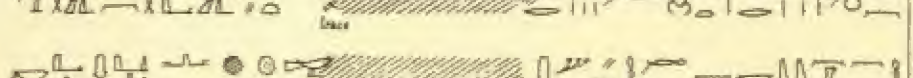

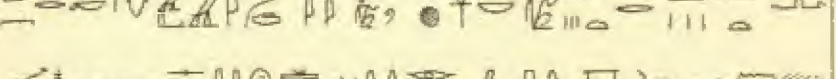
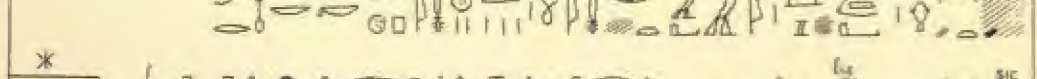
TRANSLATION.

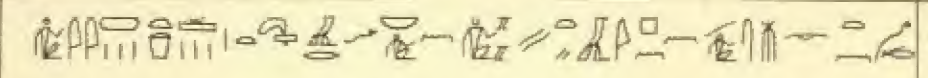
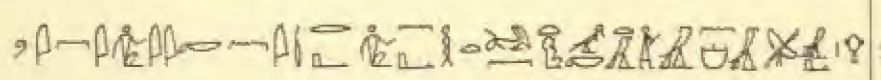
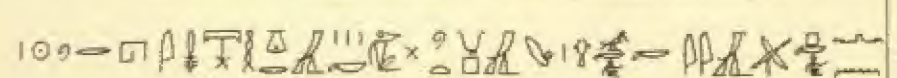
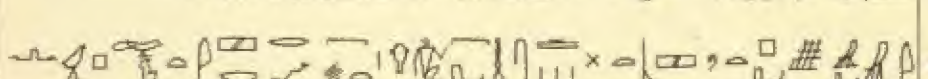
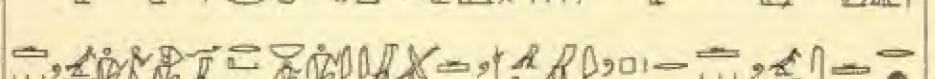
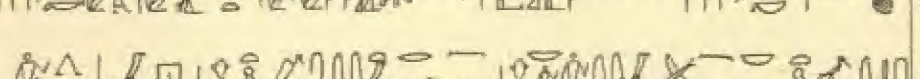
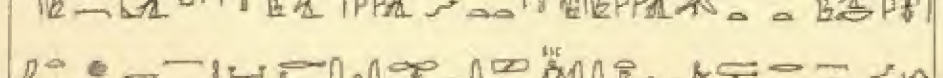
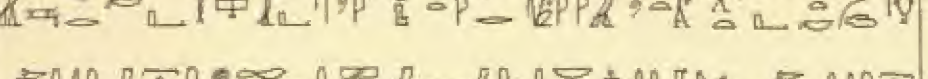
.....(1) *Teti greets his brother, his beloved, his friend of the desire of his heart, the scribe* (2) *Aahmōse, in life, prosperity and health, in the favour of Amenrē, King of the Gods, thy august god: (3) may Thoth, Lord of the Gods, and Ptah, the Great, South of his Wall, Lord of Ankh-taui, love [thee]³: may they grant thee favour and love (4) and skill in*

¹ *Mémoire sur quelques papyrus du Louvre in Notices et extraits des manuscrits de la Bibliothèque Nationale*, tome XXIV, première partie, 1 ff., with two unnumbered plates bearing a poor facsimile.

² *Zeitschr. f. äg. Spr.*, LV, 84-6.

³ There seems to be a trace of something on the torn edge of the sheet after the oddly made , perhaps  [e]: not .

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










the sight of all men. Further:—Hail to thee. Hail to thee¹. Is all well with thee? (5) Behold, my desire is to see thee, exceedingly. Further:—I have planted much barley for thee, (6) and it shall serve thee as thy(?) barley which is in the corner of land (7) along with thy flax. It is exceedingly. Moreover I will not let thee fail (8) for² anything in respect of any of my duties so long as I live. Further:—Give thy attention to completing(?) thy(?) house³ (9) which is on the river-bank: let it be done properly like every successful undertaking of thine. (10) Grant that I may return to enter into it at my coming. And let (rest lost).




(1) What⁴ Aahmōse of Peniati says to his master, the treasurer⁵ Tai. (2) Why has the female slave who was with me been taken away and given⁶ to another? Am (3) I not thy servant, hearkening to thy commands by night as well as by day? (4) Let her value⁷ be taken




¹ *ḥl ḥdw-k*. An uncommon form of salutation, the exact meaning of which is uncertain. For *ḥl* cf. SPIEGELBERG, *Corresp. du temps des rois-prêtres*, 91, and passages there quoted. Spiegelberg takes it to be an interrogative, "how." This meaning would suit the passages in letters, e.g. Pap. Sallier IV, verso, 1, 3 and 2, 2 (*Egyptian Hierat. Pap. in the Brit. Mus.*, second series, Plates CXII and CXIII), though in the first of these, *ḥl ḥd-t, twt mī ḥl sp sn*, it might be objected that if *ḥl ḥd-t* means "How are you" it is futile to add *tw-t mī ḥl* twice over with precisely the same meaning. This, however, is hardly a fatal objection. More serious is the difficulty that this meaning will not fit at all in Sallier III, 6, 8 and 8, 1, where something like "Hail" is required, "Hail the happy chance of erecting a monument in Thebes owing to the great sin which my army has committed" (Ramesses means that the cowardice of his army will enable him when setting up a memorial of the battle to claim the whole credit for himself) and again "Hail, noble warrior, etc." See also *Zeitschr. f. äg. Spr.*, LX, 69.



I cannot catch the sense of the word in the damaged passage Pap. Bibl. Nat. 237, carton 25, vs. 3 (collated), but I feel that Spiegelberg's "Qu'est-ce que vous êtes?" is impossibly harsh in the context.

ḥl in GAUTHIER, *Inscription dédicatoire d'Abydos*, II, 8, 54-55, 60, appears to be a totally different word.

² The first group in this line can hardly be read otherwise than as  and in this case it must be the writing of the preposition  studied by GUNN, *Studies in Egyptian Syntax*, 84-6. The next group is , the  being obscured by the thick long tail of another  in the line above. The  of *akt* would seem to have been omitted after . The two more obvious solutions of the difficulty, to read  for  or  for , are both palaeographically impossible.








³ There must be an error here. Is  an attempt to write the verb  , "to complete"? The masculine *rf* in l. 10 apparently referring to the feminine *ḥt* adds to the confusion.

⁴  could also perhaps be read, but my feeling in front of the original was that the scribe intended the ligature for .  would be a neuter passive participle followed by its true subject, and the meaning in either case is precisely the same.

⁵ Maspero's reading,  , followed by Spiegelberg, is impossible, and the reading here given is to my mind quite certain.

⁶ *rdlt*. An interesting survival of the M. K. use of the pseudoparticiples in a clause of circumstance. Cf. *Shipwrecked Sailor*, 73, 150.

⁷ This sentiment is not uncommon in letters. Cf. *Anastasi IV*, 8, 8 and *Pap. Turin*, P. R. CXXX, l. 3.

⁸ *šbt* (*ḡāḥetw*) is clearly a nominal formation from *šbl*, "to change," the Coptic *ḡāḥe*, "to change" or "exchange" (by way of trade). In *Pap. Turin*, P. R. LVII, l. 2        (where *šb* is masculine) clearly means "to give in exchange," i.e. to sell. But I am not at all sure that I have caught the exact sense of the phrase in the present passage. My translation assumes that Aahmōse is offering to do extra work himself to represent the contribution of the girl, who is as yet incapable of doing it. Or is

along with mine, for truly she is a child, she cannot (5) work. Or let my lord command that I should be made to deliver her tasks (6) like those of any female slave of my lord: for her mother has written to me (7) saying "It is thou who hast allowed my daughter to be taken away when she was here with thee, and I have refrained¹ (8) from complaining to my lord: since she was in thy charge in the capacity of a child." Thus said she to me by way of complaint.

COMMENTARY.

Business documents of the Eighteenth Dynasty are not common and letters in particular are distinctly rare. Hence the present papyrus has a certain historical value of its own. But what is its exact nature? The mention of the historical characters Aahmōse and Peniati gives an air of reality to the whole and our first instinct is to take both documents to be actual letters written and delivered. This is probably the case, but at the same time there are several circumstances which give cause for reflexion.

The upper fragment of papyrus certainly contains part of a letter. The end is torn away, and Maspero has assumed that the beginning is lost, since it seems almost impossible that the writer should begin with his name Teti without title or qualification of any kind. But there is need for caution here. It is true that the papyrus is closely cut above the first line: yet there are places where the bottoms of signs in the line above, if such had ever existed, might well have shown, especially towards the end of the line, and yet there is no trace of anything. What is more, we must suppose that the title of the writer, if written, was long enough to fill the whole of the lost line—which is not at all likely—for unless this line was full the scribe would hardly have passed on to the next to write the name.

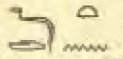
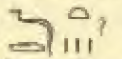
It would thus seem possible that the letter began with the first preserved line as we have it. If this is correct the fact that the writer bears no title suggests that he may be a young scribe or schoolboy and that the composition is merely a model and not a real letter. It might also be urged that if the letter is a real one it must have had an address on the verso, and if this were written, as it usually was, in a direction at right angles to the writing of the letter itself it cannot have been entirely on the piece lost at the bottom and must have been, in part at least, on the piece preserved, in which case the unknown mounter would hardly have gummed the papyrus down. I should be sorry to press either of these arguments very far, and they do not weigh very heavily against the occurrence in the letter of a known historical personage. It is of course always conceivable that in a model letter the writer might insert the name of an existing person, but it is far less conceivable that he should himself pose as the beloved brother of such an one. The evidence thus points to the genuineness of the letter, and if we may let our imagination have play for a moment we shall see in Aahmōse the clever member of the family who has

the situation that Aahmōse has been transferred to some other place or piece of work and the girl left behind with another? In this case we should translate "Let her transfer along with me be accepted." Or yet again, is the sense "Let someone instead of her (lit. 'her exchange') be taken from me." But in this case how explain *hn*? Sethe suggests an omission "(and let her remain) with me."

¹ This must be the force of *tn-n* here; otherwise the ordinary negative *nn* would have been used.

² *L.A.* to *Tai*. The mother leaves it to Aahmōse to complain to *Tai*, for he (Aahmōse) is responsible for the girl.


left the home and become a scribe in the department of public works, while Teti, a younger brother, administers the family acres, in which Aahmōse still has a financial interest. The invocation of Ptah suggests Memphis as the home of the brothers, Amūn being invoked as the state deity and Thoth as the god of writing.

The lower piece of papyrus is of greater interest. Maspero and Spiegelberg have both regarded it as a letter, and they are doubtless right. But, in the first place, what Egyptian letter ever began with the phrase  or ? And in the second place, how comes it that we have side by side, presumably from the same find, if not from the same roll, two letters, one addressed to Aahmōse and the other addressed by him to his master? Neither of these objections is fatal. To the second it may be replied that we have an exact parallel in the correspondence of Hekanakht found by the Metropolitan Museum of New York in the tomb of Hesem at Thebes¹: quite possibly in matters of business the correspondence on both sides was eventually filed in some public office. To the first objection it may readily be replied that we know almost nothing as yet about the formulae used in letters of the Middle Kingdom and Eighteenth Dynasty, and that there is no reason whatsoever why a business letter in which the scribe really had something to say should not begin with the businesslike *dd tn X*, "What X said," instead of the usual space-wasting empty salutations. If the reading *dd tn* be preferred we have the old neuter relative form, used in the New Kingdom to introduce a deposition in a court of law. That this is not its sense here is clear both from the general content of the document and by the fact that it is followed by *n nb f*, "to his master." We must therefore give it its straightforward non-technical sense "What so-and-so said." The commonest formula for the opening of a Middle Kingdom letter seems to have been *X dd n Y*, "X says to Y," where *dd* is perhaps a *sdm f* form with the subject suffix omitted as superfluous. We need therefore feel no surprise at finding in the early Eighteenth Dynasty the same simple formula varied by the use of the participle *dd t* or the relative *dd tn*².

Thus there is no reason for thinking that this letter is a model produced by a schoolboy, and we may take it to be a real historical document. It is addressed by "Aahmōse of Peniati" to "the treasurer Tai," who in virtue of his office would be the superior of the director of works Peniati, Aahmōse's immediate master. This Tai, now that he is divested of his incorrect title of "chief weaver," may be recognizable as a historical personage, though up to the present I have been unable to trace him.

An unfortunate error of transcription has led Maspero³ to suppose that the slave girl was engaged in a weaving factory, and with his ready pen he has evolved from the document an essay on the conditions of apprenticeship in such establishments. All this must, however, go by the board. We have in reality no hint as to the kind of work on which Aahmōse was engaged. It would seem that the girl's mother had allowed her to leave her home only on the definite understanding that she was to remain under the pro-

¹ *Bull. Metrop. Mus.*, Part II, December 1922, 38-9.

² It is possible that we already have in the Middle Kingdom a use of the relative form: see GRIFFITH, *Kahun Papyri*, Pl. XXX, ll. 1 and 24, where  can hardly be a *sdm f*, for it would be hard to see why the geminated imperfective form should be used, and may well be a relative, made masculine to agree with some word for "letter" understood.

³ Followed by Spiegelberg.

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tection of Aahmōse. She has now been taken away from him and the mother writes to protest, adding, however, that she has not complained direct to Tai since the girl is in Aahmōse's charge and it is consequently his business to make the complaint. This he accordingly does in the letter which we have before us.

It is doubtful whether much of value is to be inferred from this letter as to social conditions at this period, the more so since the whole subject of servitude and slavery in Ancient Egypt still remains to be worked out.





1



2

Pottery box of predynastic date, in the British Museum.
Natural size.

A NOTE ON HERODOTUS II, 93

By S. R. K. GLANVILLE

With Plates XVIII and XIX.

The photographs accompanying this note (Pls. XVIII and XIX) show two objects in the British Museum, neither of which has been fully published before, so far as I am aware, although the earlier is probably familiar to anyone who has studied the predynastic pottery in this collection¹. I have to thank Dr. Hall, Keeper of the Egyptian and Assyrian Antiquities, for permission to publish them.

Pls. XVIII and XIX, Figs. 1 and 2, are of a pottery box (B.M. 32639), $5\frac{1}{4}" \times 2\frac{1}{2}"$ and 3" high, with four feet at the corners—perhaps meant to represent those of an animal—which account for a $\frac{1}{2}"$ of the total height; its provenance is El-'Amrah, and it was presented to the Museum by the Egypt Exploration Society². Although the shape is unique³ in this type the subjects of three of the drawings, and the technique of all four, together with the nature of the ware, mark the object as a predynastic pot of the "decorated" style. Each side of the box (Pl. XVIII) has a row of four horned deer⁴, walking along a line which probably represents a desert horizon. The field is filled in with groups of parallel lines and S-shaped signs (the latter often reversed), such as are familiar in this style of pottery. One end (Pl. XIX, Fig. 2) has a boat with a branch in the prow, and two cabins, but without a standard: and again a group of parallel lines. It is reasonable to surmise, therefore, that the drawing on the other end (Pl. XIX, Fig. 1), showing six fish nibbling at a ball of food (presumably), although not known to occur anywhere else at this time, also had for its subject a phenomenon whose existence was common knowledge.

Pl. XIX, Fig. 3 (B.M. 50718) gives the obverse of a limestone flake, acquired by the Museum with a number of others, some with graffiti, some with inscriptions. A large fragment of our flake has been broken off since the artist made his sketch, which has thus lost one or quite possibly two fishes from the original group. The style of the drawing and the nature of the flake—alike in this as in the other ostraca—date this collection to the latter half of the Eighteenth and to the Nineteenth Dynasties, and place its provenance almost as certainly in the necropolis of Thebes. Graffiti of this kind are well known in every collection, and their subjects are almost invariably of one of three sorts: (1) Studies

¹ See *A Guide to the Fourth, Fifth and Sixth Egyptian Rooms, etc.*, 1922, p. 248 (fig. in text). I am indebted to Professor Newberry for two more references to the publication of this pot, viz. BUDGE, *History*, I, 98, where it is well reproduced but from one aspect only, and without any specific mention in the text, and CAPART, *Primitive Art in Egypt*, 132, Fig. 105, where Budge's illustration is copied in a line drawing reduced by half. The description in the text reads: "Another specimen [of pottery boxes] belonging to the British Museum is decorated with boats (*sic*), ibex, groups of parallel lines and with S-shaped signs."

² The pot was handed over to the British Museum in company with a large number of objects from the First Dynasty tombs and later sites at Abydos, then being excavated by Sir Flinders Petrie for the E.E.F., but it is definitely stated to have come from El-'Amrah, where Dr. Randall-MacIver was digging during the same season, also for the Fund. The natural assumption that it was found by Dr. Randall-MacIver is put out of court, however, by the absence of any reference to it in the text or plates of *El Amrah and Abydos*. Presumably it was bought in Egypt about this time, and its provenance probably rests on the word of a dealer.

³ Plain boxes in this Decorated pottery are found; see PETRIE, *Diospolis Parva*, Pl. XVI, Type 93, and CAPART, *op. cit.*, p. 132: but this is the only known specimen with feet at the corners.

⁴ Professor Newberry has pointed out to me that this is not the oryx, as it is sometimes called (nor the ibex, as in CAPART, *op. cit.*, in note 1), but the kudu, which only appears on one other pot, figured in PETRIE, *Abydos*, I, Pl. II. (The pot is in the British Museum, No. 37274.)

for conventional illustration and writing—portraits of gods and kings, figures and scenes from the funerary vignettes, enlarged hieroglyphs, etc.; (2) common objects from nature, observed in everyday life—men, animals, boats, etc.; (3) designs and patterns. There can be no question that our ostrakon belongs to the second class.

The coincidence of two sketches, drawn at either end of an interval of 2000 years or more, each representing a naturalistic phenomenon of common experience—sketches which differ only in unimportant details, *e.g.* the number of fish portrayed—can only mean that we have here two studies, at two periods of Egyptian history far removed from each other, of a single fact, and that a fact to be met with in everyday life¹. This in itself is, I think, sufficiently interesting to be worth noting. I hope, however, to be able to show good reason for believing that we have yet another link in our chain of zoological evidence, occurring about a thousand years later than that of the ostrakon.

Everyone will recall the typical account in Herodotus II, 93 of the "fish that go in shoals," *ἰχθύες οἱ ἀγέλαοι*. At the spawning season the fish all go down the Nile to the sea, the males leading and dropping their seed for the females to swallow. After a period in the sea during which the eggs fertilize, they all return, but in reverse order, and now "the females scatter their eggs, the seeds, a few at a time, and the males swallow them down as they follow²." Now returning to the limestone flake (Pl. XIX, Fig. 3) it will be seen that the round mass is marked with straight lines which cross one another, giving in a general way the effect of a ball composed of a number of smaller bodies. Anyone who has noticed frog's spawn shortly before it is about to disintegrate (when the separate cells are most clearly marked) will see how easily, in a rough sketch like ours, a criss-cross of straight lines would suffice for a conventional representation of a mass of fish's eggs. Once more; it is very unlikely that Herodotus, who "up to this point" in the book has recorded only what his own "sight and judgment and enquiry"³ have told him, and whose discussion of fishes is limited to this one chapter, is here recounting anything but a well-known fact. Now there is, as far as I know, no other illustration from Egyptian reliefs and wall-paintings of the habits of fish—*fishing* scenes of course excepted. If, then, from each of three periods so far apart as the Predynastic Age, the Empire and the fifth century B.C. one fact, and one only, concerning the natural history of fishes has come down to us, may we not expect *a priori* that the three accounts are concerned with the same fact? I have attempted to show that the evidence favours such a case. Fish are notoriously greedy; we need not therefore be surprised to find more than one fish seizing on a mass of eggs, especially when we consider that Herodotus expressly states that these are "fish that travel in shoals." There is however one difficulty in Herodotus. The phrase in which he speaks of the females dropping their eggs⁴, though not happily rendered in a strictly literal translation, is clear enough, and the question arises: How literally are we to take *κατ' ὀλίγους*, "a few at a time"? For it is obvious that it would take a great number of "millet-seeds" to make up a mass of the size seen in the two drawings. I hardly think we shall be doing Herodotus a grievous injustice if we suppose that he had got his information from "his own enquiry" and was here writing loosely. The inexactitude would be an easy one to fall into, and in any case the discrepancy is not very serious.

¹ In both cases the fish represented seemed to me to be some kind of *Tilapia*, well known to-day in Egypt by its Arabic name *balti*, and this identification Dr. G. A. Boulenger very kindly confirmed after seeing tracings of the sketches.

² Cf. ARISTOTLE, *Historia Animalium* (trans. D'A. W. Thompson), v, 5. 541^a 12, and vi, 12. 567^a 32, where the same process is described in connection with "oviparous fishes," though Aristotle shows that he himself does not believe that the female is impregnated by *swallowing* the seed of the male.

³ II, 93.

⁴ τῶν γὰρ ὁὖν ἀπορραίνουσι [αἱ θήλειαι] κατ' ὀλίγους τῶν κίχρων.



1



2



3

1, 2. End views of predynastic pottery box. *Natural size.*
3. Limestone ostrakon in the British Museum. *Natural size.*



PHILO AND PUBLIC LIFE

By ERWIN R. GOODENOUGH, Yale University

The recent publication by Mr. Bell of the letter of Claudius to the Alexandrians¹ has attracted fresh attention to the anti-Semitic riots in Alexandria and their protagonists. The problem has again suggested itself of how a man like Philo could have been selected by the Jews to lead such a delicate mission as was the presentation of the Jewish grievances to the hostile Gaius, since Philo is supposed to have been a scholarly recluse until he was suddenly interrupted in old age and sent to Rome at the head of the Legation. For the presumption is strong that selection for such a difficult and important commission would have been made solely on the basis of a man's established reputation as a public administrator. The choice of one entirely inexperienced in dealing with men and affairs of practical importance is most unlikely.

The presumption is aided by the statement in Josephus that Philo was one τὰ πάντα ἐνδοξος Ἀλεξάνδρου τε τοῦ ἀλαβάρχου ἀδελφὸς ὢν καὶ φιλοσοφίας οὐκ ἄπειρος². Here Philo is represented as being a man of fame τὰ πάντα, in all particulars—a strange statement to make of one entirely preoccupied with philosophic speculation.

As a matter of fact there can be no doubt that Philo actually spent the major part of his life in some public office. He came, Josephus tells us³, from a family of wealth and distinction, while Philo himself describes how he was compelled to devote his life largely to official duties. But the passage where Philo does so has been subject to traditional misinterpretation, so that the fact that he was a Jewish official has been obscured. The passage follows:

"There was once a time when by devoting myself to philosophy and to contemplation of the world and its parts I achieved the enjoyment of that Mind which is truly beautiful, desirable, and blessed; for I lived in constant communion with sacred words and teachings, in which I greedily and insatiably rejoiced⁴. No base or worldly thoughts occurred to me, nor did I crawl for glory, wealth, or bodily comfort, but I seemed ever to be borne aloft in the heights in a rapture of soul, and to accompany sun, moon, and all heaven and the universe in their revolutions. Then, ah, then peeping downwards from the ethereal heights and directing the eye of my intelligence as from a watch-tower, I regarded the untold spectacle of all earthly things, and reckoned myself happy at having forcibly escaped the calamities of mortal life.

"And yet there lurked near me that most grievous of evils, Envy, with its hatred of all that is fair (ὁ μισόκαλος φθόνος), which suddenly fell upon me, and did not cease forcibly dragging upon me until it had hurled me down into the vast sea of political cares (μέγα πένθος τῶν ἐν πολιτείᾳ φροντίδων), where I am still tossed about and unable even so

¹ H. IDRISS BELL, *Jews and Christians in Egypt*, 1924.

² JOSEPHUS, *Antiq.*, XVIII, 8, 1 (XVIII, 259 ed. Niese).

³ *Op. cit.*, XX, 5, 2 (XX, 100 ed. Niese).

⁴ ἐνευφραίνωμην, a word clearly reminiscent of Prov. viii. 31, where Wisdom in her rapture before the Father says: καθ' ἡμέραν δὲ εὐφραίνωμην ἐν τῷ προσώπῳ αὐτοῦ ἐν παντί καιρῷ, ὅτε ἐνευφραίνεται τὴν οἰκονομίην συντελέσας.

much as to rise to the surface. But though I groan at my fate, I still struggle on, for I have, implanted in my soul from early youth, a desire for education which ever has pity and compassion upon me, and lifts me up and elevates me. This it is by which I can sometimes raise my head, and by which, though their penetration is dimmed by the mists of alien concerns, I can yet cast about in some measure with the eyes of my soul upon my surroundings, while I long to suck in life pure and unmixed with evils. And if unexpectedly there is quiet and calm in the political tumults, I emerge from the waves winged though unable to fly, but am blown along by the breezes of understanding (*ἐπιστήμη*), which often persuades me to run away as it were for a holiday with her from my pitiless masters, who are not only men but also the great variety of practical affairs which are deluged upon me from without like a torrent¹. Still, even in such a condition, I ought to thank God that while I am inundated I am not sucked down into the depths. Rather, though in despair of any good hope I had considered the eyes of my soul to be incapacitated, now I open them and am flooded with the light of wisdom, so that I am not abandoned for the whole of my life to darkness. And so, behold, I dare not only read the sacred expositions of Moses, but even, with a passion for understanding, I venture to examine each detail, and to disclose and publish what is not known to the multitude." (*De Spec. Legg.*, III, 1-6, ed. Cohn; M. II, 299.)

So far as I can ascertain, the passage has always been interpreted as meaning that this interruption in Philo's studious retirement was caused by the anti-Semitic riots in Alexandria which began 38 A.D.² And since we know from Philo's own account of the riots that he was then an old man³, Philo is ordinarily described as having spent his entire life in scholarly preoccupation until at the very end he was called out to public responsibility. Since Philo's work on the Legation to Gaius was the only incident known from Philo's life, such an explanation of the passage was not unnatural.

But the difficulties in explaining the passage thus are several. We know from the letter of Claudius to the Alexandrians that the trouble in Alexandria was settled after only three years, while we know that Philo was at that time an old man, who would presumably have died not many years afterwards. But the plain implication of this statement from Philo is that the lamentable interruption in his privacy had occurred very long ago. It is through a vista of many years that Philo is here looking back upon a period when he was completely removed from all human attachments. With this obvious implication of the remoteness of his happy early days the prevalent assignment of Philo's change of occupation to the last years of his life is in complete disagreement⁴.

Furthermore Philo says that when he was torn from mystical happiness he was plunged so deeply into political duties that he found it impossible ever to regain his old powers of

¹ The passage is clearly to be understood in the light of Plato, *Rep.* vi, 509 sqq. There *διάνοια* leads men to τὰ μαθηματικά, etc., a type of knowledge far superior to *εἰσότης* and *εἰκασία*, but much inferior to *νοῦς*. Deprived now of *νοῦς*, Philo has left only the eyes of *διάνοια*, with which *ἐπιστήμη* seems here synonymous, for though he has wings he cannot fly in his own strength, but must be blown along from without. That is, it is impossible for him, during merely temporary interruptions in his work, to rise into a consummation of perfect mystical apprehension, though he is superior to the mass in still having his powers of *διάνοια* or *ἐπιστήμη*.

² E.g. JAB. DRUMMOND, *Philo Judaeus*, London, 1888, I, 7, 8; I. HEINEMANN, in *Die Werke Philos von Alex.* in deutscher Uebersetzung, Breslau, 1910, II, 183 n. 2.

³ *Leg. ad Gaium*, Sec. 1, ed. Cohn et Reiter (M. II, 545); 182 (II, 572).

⁴ Were these early years spent among the Therapeutae?

abstraction. In rare temporary lulls thereafter he was able to rise above the details of his work, so as to see human relationships with some perspective, and it was during these lulls that he first became interested in expounding the Law to his fellow-men. Writing seems to have formed no part of his earlier occupation. But when he could not spend his time immediately in God's presence he had to compromise, he says, by writing explanations of the Jewish Law for people who could not unaided see its deeper meanings. This accurately describes practically all of Philo's large Corpus, little or none of which can be ascribed from this passage to the earlier period. But that such extensive literary work could have been the product of scattered intervals from official pressure during only three years, or even during Philo's last ten years, is impossible. The fact that Philo's writing was done after he had entered public life makes it certain that his official duties must have occupied the major part of his mature life.

Nor can recourse be had to *ὁ μισόκαλος φθόνος* to defend the traditional interpretation, by taking it as a reference to the ill-will of Alexandrian citizens toward the Jews. *φθόνος* is of course the usual word for describing the jealousy of the fates at too great human happiness, and indeed so conventionalized was the locution that no conclusions can be drawn from it as to either Philo's biography or philosophy¹. All Philo can be understood as saying is that his happiness in his early mystical life was much too great to be lasting, and was actually interrupted by a call to public duties.

Coming from a family of position, then, Philo, like his brother Alexander the Alabarch, was clearly forced against his will to live most of his life in some political office. It is much to be suspected, from his great attempt to harmonize the Law of Moses with the current Hellenistic jurisprudence, that his duties were of a judicial character, in which he had to administer Jewish Law in harmony with the Hellenistic law of Alexandria, though this cannot be demonstrated.

¹ For a similar use of *φθόνος* see *Leg. ad Galium*, Sec. 48 (M. II, 553).

EGYPT AND SYRIA IN THE FIRST INTERMEDIATE PERIOD

By H. FRANKFORT

Problem and Method.

Ever since the publication, in 1913, of the two important papyri, 1116 A and B, of the Hermitage in St. Petersburg, it has been recognised that we were not only the richer by two most remarkable literary documents, but also that we might find in these documents valuable information about the actual course of events in the Nile-valley during one of the darkest periods of Egyptian history. Literary texts, however, are naturally vague on historical matters, their *raison d'être* being of a different order, and also in this case precision left much to be desired. It was certainly clear that the Old Kingdom had perished in anarchy and internal disorder, with a disastrous breaking up of the central government. But then the texts referred obscurely to foreigners as well; and Dr. Gardiner, who already, when publishing the Leyden "Admonitions," had suggested that an Asiatic invasion had affected the Delta at the time¹, now found additional proof for this contention². Prof. Erman first opposed³, then, as a mere possibility, admitted that view⁴. And since then more or less vague remarks about incursions of foreigners into the Delta, and their expulsion at the end of the first intermediate period, have kept cropping up in different publications⁵.

Prof. Petrie, on the other hand, ignoring the literary evidence, recently put forward an ingenious interpretation of some archaeological facts which had, in their turn, remained unnoticed by those acquainted with the papyri, and with the definiteness which characterises most of his views, he asserted that between the fall of the Old and the rise of the Middle Kingdom comes a period of foreign domination, and especially that the Seventh and Eighth Dynasties would represent a line of Syrian monarchs of whom some even "ruled Egypt as a secondary kingdom⁶."

When we find one-sided utilisation of the available evidence producing on the one hand such tantalising vagueness, and on the other so startling a statement, we naturally feel inclined to attempt to improve on the first and to check the latter by a more exhaustive treatment of the problem. But then we must leave the scope of Egyptology proper; for obviously the material on the Asiatic side has to decide upon what is a probable or even a possible interpretation of foreign features in Egypt. And our inquiry will have to start with a quick survey of the conditions prevailing in Asia during the Old Kingdom, and of the interrelations of both, as these provided the basis for the developments which we are to investigate.

¹ GARDINER, *Admonitions of an Egyptian sage*, 111.

² *Journal*, I, 105 f.

³ *Sitzungsberichte der K. Pr. Akad.*, 1919, 809 ff.

⁴ *Literatur der Ägypter*, 131, 155, n. 2.

⁵ PETRIE, *Egypt and the Old Testament*, 38, 62. BLACKMAN, *Luxor and its Temples*, 38. PIEPER, *O.L.Z.*, 1925, 227, 298.

⁶ *A History of Egypt*, I (10th ed.), 119-125.

From the time of the earliest dynasties onward Egypt comes into contact with Asia in two ways: by land on its eastern border, by sea in Byblos. And this twofold relation in fact represents two entirely different spheres which do not meet at any point at all.

Contact by land.

On the east of the Delta the Sinai desert forms a formidable barrier to any advance of civilisation either way. The secret of moving through its desolation has at all times been kept by the Bedawin, restless folk, having little to lose in any circumstances, and much to gain when occasional raids into the rich delta-lands are successful. Moreover, the caravans to and from the turquoise-mines at Wādī Maghārah formed a tempting object for their adventurous rapacity. Though they were never able to keep up a prolonged attack because of their poverty and the consequent inadequacy of equipment and also because of the lack, typical of nomadic tribes, of extensive organisation, they remained nevertheless troublesome adversaries, as the waste lands provided them with an impregnable basis for their operations. And so the land-contact between Egypt and Asia consisted of an endless series of border-wars, which, from the Egyptian point of view, were entirely defensive. As records of successful protection of frontiers and caravans we have to interpret as well the rock-tablets in the Wādī Maghārah¹ as the scenes in the mortuary temples of the Fifth Dynasty kings at Abusir, where slain Asiatics appear together with Nubians and Libyans, i.e. the eastern, southern, and western neighbours of Egypt². Down to the end of this dynasty the Sinai barrier was not passed³.

¹ GARDINER and PEET, *The Sinai Inscriptions*, 1-22.

² BORCHARDT, *Das Grabdenkmal des Königs Ne-user-Ré*, 46 ff.; *Das Grabdenkmal des Königs Sahu-Re*, II, Bl. 8.

³ The damaged battle-scene in Inti's tomb (PETRIE, *Deshashkeh*, Pl. IV) is unfortunately too confused to be used as evidence that the Egyptians had already entered Southern Palestine during the Fifth Dynasty. Prof. v. Bissing, in his careful analysis of this scene (*Rec. Trav.*, XXXII, 46 ff.), noted that the attack on the fortified settlement was drawn on a different scale from the other part, where Egyptians fight with their adversaries in the field, and he wondered (*ibid.* 49, n. 1) whether our scene was not composed out of two of the stereotyped themes which formed the repertoire of the tomb-painters. We must at least admit that the representation of the fortification is entirely conventional: the "town wall" is nothing but an enlargement of the hieroglyphic sign for a fortified settlement, drawn round a group of persons who are in that way marked as inhabiting that settlement. Such a proceeding is entirely in keeping with the representational character of Egyptian art (SCHAEFER, *Von Aegyptischer Kunst*, passim) which prevented any hard and fast division separating drawing and hieroglyphic writing, and other cases are known in which certain designs are to be interpreted at the same time as decorations and as writing-signs (BORCHARDT, *Sahu-Re*, II, 84). Consequently we have no right to see here an attack on a brick town-wall with bastions as is generally done (PETRIE, *op. cit.*, 36; MEYER, *Gesch. des Altert.*, I, 253). In Palestine, moreover, the earliest fortifications which we should compare in our case are earth ramparts with an inner retaining-wall and a revetment of small stones (MACALISTER, *Gezer*, I, 236 and 253). An attack on that with mere spikes and ladders would hardly produce much result. But, as the representation of the "wall" is too conventionalised to allow any conclusions as to its structure, so also it implies no definite area as its homeland; in fact, on the protodynastic slate fragment in Cairo, which, as Prof. Sethe has recognised, records a Libyan war (*Zeitschr. f. äg. Spr.* LII, 57), exactly the same fortifications are pictured. And Prof. v. Bissing found reason to see Libyans in Inti's adversaries because some of the adults are beardless, which is never the case with the Bedawin, who otherwise have a very similar type, and wear the same dress. That the typical Libyan garb of bead-bands and pudendal sheath is not represented need not prevent us from seeing in the scene a skirmish on the western frontier of Inti's nome instead of an expedition into Palestine. The Egyptians themselves had once worn the sheath, as we know from predynastic monuments, but it had fallen into disuse. So the curious Libyan dress which the chieftains

This conclusion is also forced upon us by what is found in Palestine: no traces of intercourse with the Old Kingdom are found. The excavations show quite clearly that Palestine could, in fact, offer nothing to induce the Egyptians to include it in their sphere of interest: we find remains of a poor population of plodding fellahin, probably bullied and periodically robbed by their roaming bedawin countrymen. Palestine was a desolate promontory, projecting from the vast mass of Asiatic civilisation on the north and north-east into the deserts which surround it on the east and south, and vegetated as such out-of-the-way places do¹. The legend of a great trade-route running through the country from north to south ought by now to have been exploded by the discouraging results of the excavations carried out in Bible-lands. The route through Palestine was a military road, important when a military power rose strong enough to covet what was beyond Palestine itself on either side. But a road which first crossed for many days a hilly country not kept in order by any one power and thus infested by predatory chieftains, and next led for a couple of days through the waterless sands between Gaza and El-'Arish, lacked every single requirement for a caravan-route². Naturally an occasional traveller might with a small train of asses manage to get through³; but that such irregular arrivals were very unimportant is proved by the entire absence, in Palestine, of any signs of intercourse with Egypt in this period⁴.

Thus all our information unanimously shows, firstly, that by land Egypt did not come into contact with any Asiatic power of political or cultural importance, and, secondly, that Egypt did not interfere at all in Asia beyond what pertained directly to the safeguarding of its boundaries and its turquoise caravans.

wear in Sahurê's temple may well have been used only on such highly ceremonial occasions as the presentation to their conqueror, while they in ordinary life, and ordinary people universally, shared with the Egyptians and the Asiatics the use of the simple loincloth. The last discussed interpretation of this difficult scene is therefore perhaps the most probable, though *a priori* it is not inconceivable that the Egyptians occasionally extended their pursuit of desert-tribes to a raid into Southern Palestine, which however remained without any political or cultural importance.

¹ None of the different chronological schemes proposed for Palestine is able to distinguish between the periods which are contemporary with the Old and Middle Kingdom respectively. I hope soon to deal with this problem elsewhere in detail.

² The more so, as the camel was hardly used yet. Camel bones in Palestine are rare before the middle of the second millennium (*Gezer*, II, 9). The few crude, older sculptures which suggest its shape remain as isolated as the probably foreign camel-shaped vase from Abusir el-Melek (*Mit. d. Deutsch. Orient. Gesellsch.*, xxx, 17). On the difficulties of the route, see WIEDEMANN, *Das Alte Aegypten*, 12. As Prof. Breasted has pointed out (*History*, 190), even in the Middle Kingdom people went to the mines of the Sinai peninsula *via* the Gulf of Suez to avoid the desert route (GARDINER and PEET, *Sinai Inscriptions*, no. 25).

³ As is shown by the scene in Khnumhotp's tomb at Beni Hasan, always supposing that Ibsha and his party did not come from the region between the Nile and the Red Sea, where one would like, with Prof. Wreszinsky (*Atlas*, II, Pls. 6-9, cf. PIEPER in *O.L.Z.* 1925, 298), to locate the Asiatics pictured in these tombs as bodyguards.

⁴ The pear-shaped mace-head (SELLIN-WATZINGER, *Jericho*, 186) cannot be considered to prove intercourse with Egypt (FRANKFORT, *Studies*, I, 125). The fayence necklace from the same site (*Jericho*, 126 and Abb. 112) is hard to date from a photograph, but the jug in which it was found suggests the Middle Bronze Age, i.e. Hyksos period (*op. cit.* Bl. 20, B 2b). Prof. Breasted mentions that a Sixth Dynasty scarab was found at Gezer (*History of Egypt*, 135), but this must be an error. I at least do not know any scarab found at Gezer which belongs to the rare and small class certainly belonging to the Old Kingdom. See below, p. 91, n. 4 and also *Gezer*, II, 113.

Contact by sea.

A very different case is presented by Egypt's oversea contact with Asia. Recently evidence has been brought forward to prove that such intercourse already existed in the protodynastic period¹, and we have long possessed literary evidence proving how regularly the connection was kept up during the Old Kingdom². The absence of timber in Egypt made the importation of wood from the Lebanon region an absolute necessity, on which not only the shipbuilding (as well for Mediterranean as for Red Sea traffic on Punt) was dependent³, but also the royal constructions for several years⁴ and even the regular course of religious observances⁵. Thus we should expect that the initiative lay with the Egyptians and what scanty information we could gather on this point suggested the same⁶. And now entirely new light is thrown on the early intercourse of the Egyptians with Syria by Prof. Montet's most remarkable discoveries at Byblos. Tradition suggested a very early date for its temple⁷; the new discoveries seem to my mind to prove definitely the existence of an Egyptian sanctuary there dating right back to protodynastic times.

Led by the occurrence of sculptured slabs built into the native houses Prof. Montet dug some pits and struck a pavement on several spots; the houses and gardens which thickly cover this part of the hill make it impossible as yet to define its exact extent; in connection with it were found pillar-bases, crude colossi, and the remains of an artificial pond, all of which suggested to the excavator that an Egyptian temple once stood on the spot⁸. Indications as to its date are not wanting; the latest objects found below the pavement date from the Sixth Dynasty; the earliest objects found on it belong to the Middle Kingdom. The pavement and the other remains of the building to which it belonged are naturally later than the first, and earlier than or contemporaneous with the second⁹; we shall see presently what either of these two dates implies.

¹ NEWHERRY, *Presidential address to the anthropological section of the British Association*, 1923; LORET, *Ann. Serv.*, 1916, 45, n. 3; FRANKFORT, *Studies*, 1, 105-117.

² Well summarised by Prof. MONTET, *Comptes rendus de l'Acad. des Inscri.*, 1921, 158 ff.

³ The fact that the "Punt-farers" were actually called "Byblos-ships" (SEITHE, *Zeitschr. f. äg. Spr.*, XLV, 7 L, not, of course, "Byblos-farers") may be equally due to their being constructed of wood from the Lebanon as to their type, which was identical with that of the Mediterranean ships, while originally the Red Sea craft was of an entirely different, foreign type (FRANKFORT, *op. cit.*, 838 ff.).

⁴ See the large beams used for the roofs and floors of the royal tombs of the First Dynasty at Abydos (PETRIE, *Royal Tombs*, 1, Pls. LXII, LXV, LXVII, and p. 8), which could not be obtained from the native acacia and sycamore trees. On the Palermo stone the two years following the return of Sneferu's forty ships of coniferous wood from the Lebanon are marked by the construction of a large ship and of palace-doors of this wood respectively. The rest of the record is unfortunately lost, but we see already how the work of several years depended on the result of an expedition.

⁵ For the supply of resins used in mummification (for evidence of early dynastic mummification, see G. ELLIOT SMITH and WARREN R. DAWSON, *Egyptian Mummies*, 24, 72 ff. and Figs. 1, 2, also GARDINER, *Admonitions*, 6-8) and 'i-wood (for sarcophagi, temple-furniture and flag-staves) this dependence is obvious. But the same has been rightly pointed out by Prof. Montet as regards incense (*op. cit.*, 160) fetched from Punt by "Byblos-ships."

⁶ KOESTER, *Das antike Seewesen*, 19 ff., has shown that the ships pictured in Sahurê's temple are certainly Egyptian sea-going vessels developed out of the Nile craft.

⁷ LUCIAN, *De Dea Syria*, *ἡ πόλις παρὰ πολὺ τοῖς Ἀλεξανδρίαις ἱεροποιεῖται*. Cf. M. DUSSAUD in *Syria*, 1923, 302.

⁸ Provisional plans, *Comptes rendus de l'Acad. des Inscri.*, 1923, 84 ff.

⁹ *Ibid.*, 94-5. The extent of the area over which the finds consistently bear out this simple conclusion is large enough to guarantee its validity. One has to exclude, provisionally, the large jar with Cypriote

The objects found below the pavement deserve closer inspection. The majority appeared to fall into two groups; each of these contained products of different periods, some being of definite Old Kingdom character while others are older, as their parallels are found at Hierakonpolis, or in the royal tombs of the First Dynasty at Abydos; some even one would, in Egypt, not expect to find after the close of the middle predynastic period¹. This difference in date proves that neither of the two groups can be explained as foundation deposits². The resemblance with Hierakonpolis is especially significant: there and at Byblos we find similar objects—fayence figures of baboons and other animals, stone vases and other objects of the first five dynasties, mixed together under a reconstructed building; and in both cases the obvious explanation seems to be that after some destruction or after a period of disuse, when the site was cleared and prepared for rebuilding, these different objects found among the ruins were buried in the temple precincts: they were consecrated by once having belonged to the older sanctuaries. This inference is proved to be correct by the actual circumstances of the finding at Byblos³ and by the remains of walls, found at a still deeper level, but not yet explored⁴.

What conclusions is one entitled to draw from the fact that the Egyptians, from proto-dynastic times onward, possessed a sanctuary at Byblos? In later days no temples built outside Egypt proper, whether in Nubia or Palestine, were ever outside actual Egyptian dominion; on the contrary, their erection indicated that the surrounding region was to be regarded as definitely annexed by, and inseparable from, the Egyptian empire. One might even feel inclined to explain in this way the temple erected under the Twelfth Dynasty near the mines of Serâbit el-Khâdim in the Sinai peninsula. But it seems impossible to assume the same for Byblos during the Old Kingdom. In the very meagre lists of titles which adorn the tombs of its high officials none, to my knowledge, can be connected with service in a colony. The expeditions to Byblos seem to have remained none too frequent and always highly remarkable events⁵. They were so even in the times of Tuthmosis III,

seals, Hyksos scarabs, etc. For though it is not inconceivable that the Hyksos scarabs were used in Syria earlier than in Egypt, it is safer at present to consider this find, because of its isolated position, as a hoard buried in times of upheaval by a prudent associate of the later temple, who by some reason or other was prevented from reclaiming his property. In the recently published number of *Syria* (1925 fasc. 1) M. Hubert discusses some bronze objects of Caucasian origin belonging to this isolated group, and assigns them, as their earliest possible date, to a period which is exactly in keeping with the usual date of the Hyksos scarabs.

¹ So the slate-palette, *Monuments Piot*, xxv, 237 ff., Fig. 9, 2, cf. *Prehistoric Egypt, Corpus*, Pl. LIII, 23, and perhaps also the bird's head (*op. cit.*). The ivory figure of a bird (*op. cit.*, Fig. 28, 1) is certainly protodynastic: cf. the ivory figure of a nightjar in *Ancient Egypt*, 1915, 3. This early date is the more remarkable as M. Clermont Ganneau recognised it as a swallow, and naturally referred to the metamorphosis which Isis undergoes even at Byblos in the Osiris myth.

² As Prof. Montet thought (*C.R.* 1923, 87). The finds from Susa quoted as parallel are to be explained exactly as the finds at Hierakonpolis and Byblos discussed above: the Susian find also contains objects of very different date. At Hierakonpolis, underneath the brick temple, an actual example of an Old Kingdom foundation-deposit was found (*Hierakonpolis*, 13 and Pl. LXVI). It consists entirely of pottery. The date, which could not be determined at the time of discovery, is now fixed, as it seems to me, by the excavations at Kau el-Kelt (of the British School of Archaeology), shortly to be published.

³ *C.R.*, 1922, 12: "...d'autres ont souffert d'un grand incendie, qui a ravagé le temple. On voit que les décombres ont été nivelés. Puis on a répandu du sable et recouvert le tout par un dallage."

⁴ *Mon. Piot.*, xxv, 240.

⁵ This is definitely shown by Sneferu's record on the Palermo stone (see above, p. 83, n. 4) and by the fact that Sahurê thought such an expedition worthy of an extensive record in his mortuary temple. That the sea-going vessels pictured there went to Syria is shown by the vases and bears which appear in the

when Egypt was well accustomed to international intercourse; in this reign a much travelled dignitary chronicles in his tomb his leadership of a Byblos expedition as the great feat of his life¹. The same tomb-inscription suggests an explanation for the existence of an Egyptian temple at Byblos in a few precious lines, which rank among the rare instances in which one catches a glimpse of Egyptian religion, not fossilised in formulas and ritual, but actually prompting a living man to action: Tuthmosis' envoy, on arrival in the woods of the Lebanon, at once offers a sacrifice to the goddess of the region, before he starts felling the trees².

The little scene confirms what one would expect; whatever claims to omnipotence, creatorship and rulership theologizing priests might formulate for their respective gods, in practice the Egyptians had as little confidence as any of their contemporaries in the power of a deity outside its own realm. And obviously a goddess had to be propitiated, from whose domains the Egyptians carried away the costly wood³; as further the divine power remained always to some extent inherent in the objects once affected⁴, the successful utilisation of the wood, as well as the success of future expeditions, were dependent on the permanent goodwill of the goddess; and this permanent goodwill was best ensured by guaranteeing the permanency of the honours bestowed upon her, i.e. by the erection of a sanctuary. In these circumstances the existence of an Egyptian temple at Byblos need not prove at all that the port of the Lebanon was considered an Egyptian possession. Even the fact that western, Aegean, influences are but faintly traceable in Syria⁵, and entirely absent in Palestine and closely related Cyprus, does not prove that Egypt kept the Levantine seas closed by means of a navy, which, as Dr. Hogarth has rightly pointed out, was the *conditio sine qua non* of Egyptian empire in Asia in later times⁶. Down to the end of the Old Kingdom Egypt simply enjoyed the advantage of being far ahead of all surrounding civilisations. In the Aegean the vitality of the Early Cycladic and Early Minoan civilisations (though they were marine and mercantile in character and enterprising enough) was as yet

same temple, and were certainly brought back by the expedition pictured. They exclude the other possibility, viz. a sea-expedition to Sinai, such as we know to have been equipped in the Middle Kingdom. The dress of the captives or slaves on board these ships also excludes Punt. See also p. 83, note 6 above, against Sethe's objections (*Zeitschr. f. äg. Spr.*, XLV, 10) to accepting these sculptures as representing a Byblos expedition.

¹ Discussed by SETHE, *Sitzungsberichte der K. Pr. Akad.*, 1906, 358 ff. We know that the same official went to Sinai: *Urk.*, IV, 548.

² *Ibid.*, 359, l. 9.

³ Thus Hatshepsut's expedition takes with it offerings for Hathor of Punt "that she may bring wind" (NAVILLE, *Deir el Bahari*, III, Pl. LXXII, left-hand bottom; *Urk.*, IV, 323, ll. 1-5). Clearly the dominion of the foreign goddess starts as soon as Egypt proper is left. On arrival in Punt, new offerings of course are presented (NAVILLE, *op. cit.*, Pl. LXIX; *Urk.*, IV, 323, l. 6-324, l. 1). When after his conquest Sesostris III definitely annexes Nubia up to the second cataract, he establishes a temple at Semneh in which Dedwen, the god of the region, is honoured.

⁴ Therefore we find not only at Byblos proof that the "Mistress of Byblos" was worshipped (*C.R.*, 1921, 167; *Mon. Piot.*, XXV, 253, 271), but also in Egypt itself (ERMAN in *Zeitschr. f. äg. Spr.*, XLII, 109 f.). The Pyramid Texts, which aim at a complete survey of all divine powers in existence, seem also to mention some gods of the Lebanon region (MONTET in *Syria*, 1923, 181 ff. and *Mon. Piot.*, *ibid.*). One must not be misled by the fact that the Egyptians identified the "Mistress of Byblos" with Hathor, to assume that in reality they worshipped an Egyptian goddess in Syria. Hathor of Byblos, Hathor of Punt, Hathor of Nubia, Hathor of Dendera, all are separate deities, who without this "translation" would simply have remained inconceivable to the Egyptian mind.

⁵ Probably M. Dussaud is right in seeing an Aegean importation in Byblos in a stone bowl: *Mon. Piot.*, *op. cit.*, 260 and Fig. 16.

⁶ *Journal*, I, 16.

entirely absorbed by their own rapid growth. The eastern centre of civilisation in Southern Mesopotamia strongly influenced all Western Asia in cultural matters, but was far away. The native Syrian civilisation apparently remained in a state more or less on a level with predynastic Egypt¹. And thus the highly remarkable developments of early dynastic times enabled Egypt easily to maintain henceforward a predominating position in the Levant by mere cultural superiority.

When, at last, force comes into play, Egypt's position at Byblos is lost at once. And, what is worse, she finds her own national existence at stake. It is under the Sixth Dynasty that we find the forebodings of what actually happened in the subsequent intermediate period.

Sixth Dynasty.

In both spheres of Asiatic intercourse important changes become manifest under the reigns of Pepi I, Merenrê and Pepi II. It is true that we lack for the Fifth Dynasty material to compare with that of the Sixth, under which the nobles had their biographies sculptured in their tombs. But a closer scrutiny of the facts recorded strongly suggests that the unrestrained loquacity typical of this dynasty (the long mortuary texts are now sculptured in the kings' pyramids) and of aged civilisations in general is alone responsible for the impression that the situation has actually changed.

A significant difference in general character strikes us when we compare the references to Asiatic with those to Nubian wars in these inscriptions. Nubia, often mentioned, obviously considered as Egyptian dominion, belonged clearly to the sphere of activity of certain high dignitaries, mostly the lords of Elephantine, who bore definite titles in this respect: Governor of the South, Keeper of the Door of the South, or even, in the case of Pepinakht, Governor of Foreign Countries. Here then are clear signs of regular, organised activity in which the initiative evidently lay with Egypt. Entirely different is the position in connection with Asia, which is not only less frequently mentioned, but also does not enter into the province of any official in particular. Egypt is not the active party there. Whenever trouble arises somebody is appointed to act, and this action is, as under the foregoing dynasty, purely defensive; but while it is apparently undertaken on a much larger scale, its results seem to be far less satisfactory. The unrest on the eastern border seems to differ essentially from that of former days, and in fact suggests the existence of an adversary, either at close quarters or perhaps still in the background, such as neither the adjacent desert-lands nor even Palestine, as we know from the excavations, could possibly foster.

In the reign of Pepi II, Pepinakht records how he was sent to bring back the body of a naval officer who had been killed by Asiatics when building a ship for Punt². This shows the Bedawin pressing southward, and penetrating into the mountainous country between the Nile valley and the Red Sea. The inscriptions at Wâdi Hammâmât suggest no such risks as those run by former expeditions³. The same increased pressure on the eastern border is

¹ Except copper-working, always superior in Asia. Among the Byblos finds the copper figurines are certainly native to Syria (*Mon. Piot.*, xxv, 265, Fig. 21 and Pl. XX). The *Cervidae* and *Capridae* at all times are typical of Syrian sculpture. Parallels to the human figures are found at Gezer (*Gezer*, II, 305 and cccxi) and Tell el-Hesi (Blass, *Mound of Many Cities*, 67, Fig. 110), though of somewhat later date.

² *Ork.*, I, 134, l. 13-135, l. 17.

³ COUAT and MONTET, *Les inscriptions du Ouadi Hammamat*, 27, for the unmilitary character of these expeditions in general.

stands in no relation to its extraordinary length; in fact they are much rarer than those of Pepi I. And the reason of this disproportion is clear: the temple was laid in ashes under his reign, and the traces of fire which disfigure the Old Kingdom objects left among its ruins give grim comment on Ipu-wer's distress who, probably at the court of Pepi II, complained: "Men do not sail northwards to Byblos nowadays" to fetch the necessary wood and resins¹. The archaeological evidence from Byblos shows that it was not because of the internal disorder in Egypt that the expeditions to the Lebanon could not sail. There also we find the hostile and destructive forces at work; all through Syria there seems to run a current which ultimately sets against Egypt. In Uni's inscription we see how under Pepi I's reign the first waves come breaking on the eastern border, with anything but decreasing force. In the reign of Pepi II the Punt expedition fails, access to Byblos is lost, Sinai remains unvisited. And towards the end of the same reign Egypt's fate all of a sudden is wrapped in darkness, and only recently literary evidence has suggested that this was the darkness of anarchy and disintegration². We may expect then that the Syrian stream, which we watched growing, would now burst the barriers of the unsettled state and swamp the country. But if so, archaeology ought to reveal some sediment left by the flood. And that, indeed, archaeology does.

Button-seals.

It is obvious that times of disorder do not leave extensive or lasting monuments, and it is therefore not astonishing that the foreign influence in Egypt is traceable in a class of essentially private and personal objects, namely seals.

As is well known the seals used from the First to the Sixth Dynasty in Egypt were, as in Babylonia, cylinders. One of these (Fig. 1)³, not in any way different otherwise from the well-known group of seals belonging to Pepi I's dignitaries⁴, has subsequently been engraved with curious and entirely un-Egyptian designs. Similar themes appear on a class of small ivory, bone or steatite objects, which for the first time begin to appear in graves definitely belonging to the Sixth Dynasty⁵, and which can in no way be derived from anything known in Egypt in earlier times. The shape of these "button-seals" is semi-



Fig. 1.

¹ GARDINER, *Admonitions*, 323, 6-8.

² *Admonitions*, passim; *Prophecy of Neferrekeu*, passim.

³ In Capt. Spencer Churchill's collection. I am greatly indebted to Prof. Newberry, who kindly allowed me to publish his drawing. The legitimate inference is that a foreign influence became manifest at a time when such cylinders were still current, i.e. under or more probably just after Pepi II's reign.

⁴ PETRIE, *Scarabs*, 6, 3, 4-5; NEWBERRY, *Scarabs*, Fig. 31. British Museum, 2602-5.

⁵ PETRIE, *Denderah*, 10; *Dios. Parva*, 39, 40, Pl. XXV; *Heliopolis and Kafr Ammar*, Pl. XIV, 14; REISNER, *Archaeological Survey of Nubia*, Pl. XLI, 32, 35; GARSTANG, *Mahama and Bêt Khallaf*, Pl. XXXIX and p. 33.

⁶ Naturally, I can only refer to published material: the forthcoming volume on Mr. Guy Brunton's excavations for the British School of Archaeology in Egypt at Kāu el-Kebīr will throw much new light on the subject. I have to thank Prof. Petrie for his kind permission to refer to the collection at University College, London. Button-seals are published and discussed in NEWBERRY, *Scarabs*, 56 ff. and Figs. 33-52; PETRIE, *History*, I, 120; *The Antiquary*, 1896, 136.

cylindrical, oblong-pyramidal, or round with a pierced knob-handle, and their shape, as well as the engravings they bear on their flat base, is obviously foreign. Apparently their vogue lasts all through the First Intermediate Period; the pierced handle becomes one in the shape of an animal's head¹; then small figurines of complete animals or sometimes even men appear still showing the same engraved patterns². These are found at Sedment among purely "Eighth Dynasty" remains³, and one even bears the cartouche of one of the Mentuhoteps of the Eleventh Dynasty⁴. Besides these several cylinder-seals are known which resemble so closely the button-seals in their designs that they are doubtless contemporary with them⁵. (Compare Figs. 2 and 3.)



Fig. 2.



Fig. 3.

The later types of button-seals are certainly of Egyptian manufacture; they often show intricate "maze-patterns," which may have been developed out of the earlier designs. But as we have said already, these early designs are entirely un-Egyptian, even when occasionally clumsy attempts are made to render an Egyptian motive, such as two Horus-falcons facing an O sign. A closer scrutiny of these earlier objects leaves no doubt as to the origin of the foreign features; they appear again in and, in fact, are typical of the Syro-Cappadocian glyptic⁶.

There we find the same characteristic motives⁷, the same predilection for *tête-bêche*

¹ NEWBERRY, *op. cit.*, Fig. 40. Others in the Petrie Collection.

² Strikingly so, NEWBERRY, *op. cit.*, Figs. 85, 86.

³ PETRIE, *Sedment*, Pl. VIII, 2, 4, and p. 13. The date "Eighth Dynasty" is naturally not to be taken for as well defined as its wording suggests; but we may say safely that the cemetery belongs to the latter part of the intermediate period.

⁴ NEWBERRY, *op. cit.*, Fig. 87.

⁵ Extremely close are the relations between the button-seals and PETRIE, *Sourab*, nos. 140, 143, 174. Other similar cylinders present a very thorny problem, which at the present stage of our knowledge cannot fruitfully be discussed. I have assumed elsewhere, inquiring into the origin of the cylinder-seal, that related cylinders belong to the protodynastic period, and the appearance in Crete of similar motives in the First Early Minoan Period confirms that assumption. It is not impossible that at that early period influences from the same quarter produced similar results to those noticed in the First Intermediate Period; perhaps even there was continuity, for the Syrian influence in protodynastic times was greatest in the Delta, and it may have lingered on there only to reach Middle and Upper Egypt (from which all our material comes!) with renewed force during the Asiatic influx of the First Intermediate Period. See also FRANKFORT, *Studies*, I, 130 ff. In our present inquiry we had better leave this controversial material alone.

⁶ The fact that so few excavations have been carried out in Syria and Cappadocia leaves us rather in the dark about the glyptic of these regions previous to the last centuries of the third millennium. This of course is by no means a reason to deny its earlier existence, as Dr. Hogarth and Dr. Contenau are both inclined to do. We shall in the present study find ample indirect evidence to the contrary. See also p. 94, n. 8, below. Cf. MÜLLER in *O.L.Z.*, 1925, 164.

⁷ HOGARTH, *Hittite Seals*, nos. 13, 86; WEBER, *Altorientalische Siegelbilder*, 417, 418; CONTENAU, *La glyptique syro-hittite*, 129; ED. MEYER, *Reich und Kultur der Chetiter*, Fig. 42. Geometrical designs prove

arrangement¹, and for either purely linear designs², or diagonal hatching to substantialise the body³. In addition to these very typical characteristics, there is a cylinder found in Egypt, and closely related to those appearing together with the button-seals, which belongs to a class typical, to the exclusion of all other regions, of North Syria⁴. Finally there is a characteristic button-seal of the early ivory class, which shows a seated pig-tailed man of the type peculiar, at all ages, to North Syria, or perhaps Cappadocia, and also represented on early cylinder-seals from those regions⁵. (Compare Figs. 4 and 5.) The curious development of Cretan glyptic in the latter part of the Early Minoan Period supplies some indirect



Fig. 4.



Fig. 5.

proof of a Western Asiatic origin of the button-seals and the related Egyptian cylinders. For besides analogies to these there appear in Crete other features, unparalleled in Egypt, but explicable if we accept an Asiatic centre of diffusion for the whole group of phenomena⁶.

less of course; still HOGARTH, *op. cit.*, 12, 136 are not without importance, and have exact parallels among the button-seals, just as 124-131, which are less typical.

¹ This is Hogarth's "reversible type," e.g., 12, 15, 81, etc. and even 152; CONTENAU, *op. cit.*, 129, 195; CHANTRE, *Mission en Cappadoce*, 160, Fig. 136.

² HOGARTH, *op. cit.*, 81, 86; WEBER, *op. cit.*, 417, 418; CHANTRE, *op. cit.*, 159, Fig. 30.

³ HOGARTH, *op. cit.*, 12, 15, 16, 86; WEBER, *op. cit.*, 86, 422; CHANTRE, *op. cit.*, 161, Figs. 144, 147. On archaic Sumerian seals hatching seems only to occur to indicate the fur of goats, the mane of lions, fringed robes, etc. DELAPORTE, *Catal. Louvre*, A 49, is Syro-Hittite. All the Syrian characteristics are also found on the Elamite seal-cylinders, which therefore are only one more proof of the north-western origin of the second Susian civilisation which I have established elsewhere.

⁴ PETHIE, *Scarabs*, 143; which is not pierced longitudinally, but has a perforated projection on its top (cut off in the illustration). It thus belongs to Dr. Hogarth's "tanged" class. Its nearest relation is the cylinder found at Nag' el-Dér (MACE, *Nag' el-Dér*, II, Pl. 56 a and p. 56), which is dated to the Sixth Dynasty, and shows the same division of the oblong field by sharp zigzags. Otherwise its design is closely related to that of the contemporary button-seals.

⁵ WARD, *Seal-cylinders of Western Asia*, 900. The Asiatic seal shows men drinking through a reed. This probably points to the use of some unclarified liquid, while the same is suggested by pots with strainer-spouts which from very early times onward are typical of Anatolian ceramics. This adds importance to the motive of this pig-tailed man, for not only his hair-dress but also his action defines him as a northerner (the one similar seal found in Mesopotamia, WEBER, *op. cit.*, 417, is Hittite in style). In Egypt, where this style of drinking was hardly known (only a Syrian soldier on a relief from Tell el-'Amarnah in Berlin drinks in that way), the motive is changed into the well-known gesture of smelling a flower; and as such it appears on our button-seal. This pig-tail starting from the top of the head must be distinguished from the "look of youth" (see FRANKFORT, *Studies*, I, 88 f.).

⁶ Without parallel in Egypt are the animal-shaped objects (XANTHOUDIDES-DROOP, *The Vaulted Tombs of Messara*, Pls. IV, VIII, XIII, XV) closely related to well-known Asiatic types (DELAPORTE, *Catal. Louvre*, A 1, 2, 3, etc., 12, 13, etc., 1088, S 197, etc.; *Journal*, VIII, Pl. XXV, 1-4), but very different from the Egyptian theriomorphic objects, which appear towards the end of the First Intermediate Period. Others also; the seal-form (cylinders engraved on the short sides instead of on the circumference) seems entirely native.

Notwithstanding the closeness of the relation of the Egyptian button-seals to Syro-Hittite glyptic, we cannot consider them as importations into Egypt. Their misunderstood Egyptian motives, as well as the long popularity they enjoyed in Egypt, and the number of the glazed specimens of unquestionably native manufacture lead us to consider them as objects introduced by a foreign element, which settled in Egypt at the time of their first appearance, i.e. towards the end of the Sixth Dynasty.

It is highly probable that the button-seals originally were "seals," though with them, as with any other sphragistic class, appear at once sham objects, which only served as ornaments or amulets¹. Besides the fact that actual impressions of real button-seals are known², the lasting influence the button-seals demonstrably had on the Egyptian seal-form makes the assumption unavoidable. It is in fact through the button-seals that the transition was effected from the roller-seal, the cylinder, which was paramount till the end of the Old Kingdom, to the stamp-seal, the scarab, which prevails from the early Middle Kingdom³ onward. Proof of this is provided by a definite class of early scarabs, which repeat, engraved on their base, button-seal designs⁴.

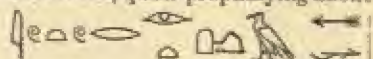
Now whenever, in historical times, we notice a change in the seal-form in any region of the Near East, we find this change always coinciding with a political one⁵. Arguing from the known to the unknown, one would like to assume the same for Egypt in the First Intermediate Period, and the stylistic analysis of the supposed button-seals has shown that the source of the political change must be looked for in North Syria or Cappadocia. How deeply the country was in reality affected is shown by the fact that even royal monuments betray the foreign influence.




¹ Such objects, where the design is choked with glaze, induced Prof. PETRIE to reject the interpretation as seals (*Hist. of Egypt*, I, 119); but the early and apparently original ivory and steatite ones are practicable seals. His own interpretation, based on the *tête-bêche* arrangement, that they were distinctive badges which "might be seen anyway upward" is hardly suitable for objects of so small a size that one must actually hold them in the hand to see the design at all.

² One in University College, London. I have to thank Dr. Friedrich Matz for drawing my attention to *Berlin Inv.* 20378, a piece of clay with seal-impressions of a meander-like nature, similar to the "maze-patterns" of our button-seals.

³ PETRIE, *Scarabs and Cylinders*, 4, 14-18. The small scarabs with button-seal designs (see following note) confirm the early dating of related specimens with names (PETRIE, *op. cit.*, 3, 1. 1; 4, 5, 1. 2, etc.).

This change of seal-form is the most obvious trace the Syrians left in Egypt; it lies outside the scope of the present study to enquire into the full extent of their influence. But I just wish to refer to a curious bit of evidence which comes from the second Petersburg papyrus, where Neferrehu, quasi-prophesying about


what shall happen in the First Intermediate Period, says (l. 40): 

   "There shall be made arrows of metal." This is a senseless exclamation, unless the inference is that this was not done before. One can well conceive the Syrians, with their superior copper-working, introducing such a novelty. And in fact we find that "the earliest metal arrow-heads dated in Egypt...found in the sandbed of the temple of Sonkhkara, Eleventh Dynasty" (PETRIE, *Tools and Weapons*, 34).

⁴ Strikingly so at Sedment, where in one grave were found a scarab and a late type of button-seal in the shape of a frog engraved with identical patterns (*Sedment*, Pl. LVIII, 3, 4). Such scarabs were also found at Kau el-Kebir and in private hands I have seen many small scarabs with "maze-patterns." Compare further PETRIE, *Tombs of the Courtiers*, Pl. III, 19 (which we need not, with Prof. Petrie, date before the Sixth Dynasty, because contracted burials only disappear in the First Intermediate Period), with PETRIE, *History*, I, Fig. 73 D.

⁵ See WEBER, *Altorientalische Siegelbilder*, 3, 4.

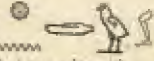
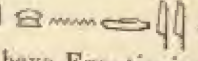

Royal Monuments.

In the Petrie collection at University College, London is an object intermediate between button-seal and scarab¹; in style of cutting it is identical with some of the later types of glazed button-seals; moreover, it shows the early "lotus-design" of the transitional button-seal and scarab from Sedment. It bears the name , which, if it is read Telulu, as there is great probability it should be, sounds Semitic² and, most important fact, appears in the Abydos list as that of a king of the First Intermediate Period. If up to the present we have had to deal with outlandish objects belonging to unknown persons, the matter

assumes a different aspect when we find one of these very foreigners acknowledged as king even in Nineteenth Dynasty lists. And Prof. Petrie, who with his astounding intuition has felt the true meaning of all this material without however providing sufficient proof, has recently recognized³ that we possess a monument of yet another king of this obscure dynasty (Fig. 6): a cylinder which bears the name of Khendy, preceding Telulu in the Abydos-list by four places. The differ-



Fig. 6.

ence in spelling,  in the Abydos-list and  on the seal, need not trouble us; the determinative shows that the scribes have Egyptianized the incomprehensible name by assimilating it to the verb . And if, as is probable, the ending -ndty in the Turin-papyrus belonged to the name of the same monarch, we may even determine his place with still more precision: both he and Telulu are then kings of the Eighth Dynasty.

Obviously it would be of importance if we could test this attribution by an independent argument; and thus one is tempted to try, by a stylistic analysis of our thoroughly un-Egyptian cylinder⁴, to detect its chronological as well as its cultural or geographical affinities.

Fortunately our cylinder-seal does not remain quite isolated, though, among the thousands of cylinders known, I have only been able to trace one which is closely related to ours⁵ (Fig. 7). Here we find again the actual scene framed in by a vertical guilloche and a vertical

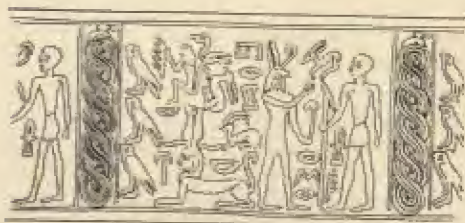







Fig. 7.

row of animals; we recognize the same ibex couchant; the hieroglyphs are as clumsy in




¹ PETRIE, *Scarabs and Cylinders*, Pl. 8, nos. 7, 10. See *History*, I (10th ed.), 124.



² Cf. *Eur.*, xvii, 22, ; also , etc. In addition there are remains of his prenomen Nefer-ke-rê on the seal, namely  and  for .

³ PETRIE, *History*, I (10th ed.), 123.

⁴ It is in shape, cutting and design unlike any Egyptian cylinder I know.

⁵ MÉNANT-DE CLERQ, no. 389 and COSTENAU, *op. cit.*, 81.

one case as in the other, and the  and  are identical; the  is incorrectly made in the second example. Finally, both seals are of the same size and of the same—none too common—material, green jasper.

One might feel inclined, as Dr. Contenau does with the one known to him¹, to add our two cylinders to the large class of Egyptianizing Hittite cylinder-seals, which belong to the best period of so-called Syro-Hittite glyptic in the second half of the second millennium². But a closer scrutiny reveals the superficiality of the resemblance. It is true that they have some themes in common; the guilloche (though very rarely vertical on Hittite seals)³, the little *Capridae* and hares, the monkey-like imp, Egyptian-looking gods and the  sign appear alike in both groups. But these common themes cannot disguise the fundamental difference in general character, which widely separates our two seals from this well-known Hittite class. For the latter possesses a definite and very peculiar character of its own; if Egyptian elements appear, Asia also asserts itself strongly by the regular occurrence of astral symbols and Babylonian gods or cuneiform script⁴; and even the  sign, the only hieroglyph borrowed⁵, never functions as a writing-sign but figures, isolated, as a sanctified symbol, on an equal footing with solar and lunar signs, which fill the field all round the high-capped king. The Hittite seals, in fact, though the ultimate origin of many of their elements may be found abroad, have as vigorous a character of their own as the Hittite civilization itself, which, borrowing from east and west, knows how to express its own peculiar nature in the blending of these foreign elements.

Our two seals, on the other hand, try with clumsy whole-heartedness to be thoroughly Egyptian. Everything which the unsophisticated mind would recognize as Asiatic is carefully avoided. Egyptian gods prevail entirely and the abundance of Egyptian hieroglyphs tries to dissimulate the fact that their sense and use is but hardly understood. All the same they do not figure as isolated symbols; though the orthography blunders and though hieroglyphs are partly used alongside with goats and hares to provide the strong "horror vacui" with material to fill the field, the majority of the Egyptian signs have a linguistic function⁶. No greater contrast with the Hittite seals could be imagined: there we find the self-confident eclecticism typical of all later Asiatic civilizations—in our case we see the



¹ *Op. cit.*, 128 f.






² CONTENAU, *op. cit.*, nos. 82–88; WARD, *op. cit.*, nos. 805–821; HOGARTH, *op. cit.*, nos. 178, 179, 182.

³ DELAPORTE, *Catal. Louvre*, A 894; WARD, *op. cit.*, 1009; WARD, *Cylinders... in the Library of J. Pierpont Morgan*, 204, 249.

⁴ CONTENAU, *op. cit.*, 82, 83, 85, 88; WARD, *op. cit.*, 810, 811, 816; WARD-MORGAN, *op. cit.*, 205, 238; DELAPORTE, *op. cit.*, A 927; HOGARTH, *op. cit.*, 182.

⁵ And always of a different shape than in our two seals.

⁶ In the Khendy seal this is obvious, though we may note the unusual orthography of *ʿnḥ*, with only  not  as phonetic complement. The second seal bears to the left of the god Horus apparently his

name, with  for . The worshipper in front is named *ʿnḥl* with *rar* for *raf*. It is tempting to see in the third sign to the left of Horus a distorted rendering of , and to read *mry Hr*, for in the Abydos-list the king following Khendy is called   Merenḥôr. Unfortunately, with our illiterate seal-cutter on the one hand, and on the other the known liberality of Nineteenth Dynasty scribes in handling ancient names, this must remain mere speculation.

childish attempt to present as natural and proper what obviously remained thoroughly alien in its essentials.

Though, therefore, we are not entitled to consider our two seals as belonging to this particular Hittite class, their real nature, which the seal-cutter so carefully tried to hide under Egyptian paraphernalia, is all the same revealed by the very themes which we found our two seals to have in common with Syro-Hittite glyptic. For these themes are not confined to the Egyptianizing class of Hittite seals alone; the hares, *Capridae*, guilloches, the monkey-like imp are common to the Syro-Hittite glyptic of all periods¹.

Thus we find the relations of the two seal-cylinders in exactly the same region where we localised, by an entirely independent analysis, the parent stock of the button-seals. And one curious motive, occurring on both, reveals the historical background which gives its true meaning to the appearance of these Asiatic influences in Egypt. This theme is the monkey-like imp².

Historical background.

It already appears in Crete in the Second Early Minoan period on the earliest engraved objects, which, as we have seen, are due to Asiatic influence³. In Syria and Cappadocia it must have existed early, though the deplorable confusion still reigning in Nearer-Asiatic archaeology prevents us from quoting contemporary examples, which we must infer from Aegean and Egyptian material to have existed. Anyhow, it is a standing feature in the later Syro-Hittite glyptic⁴. Most significant is its appearance in Mesopotamia. The earliest examples I have been able to trace belong to the time of the Third Dynasty of Ur⁵, i.e., immediately after the expulsion of the northern invaders from Gutium, to whom, it seems, no seals can be assigned. It flourishes particularly under the dynasty of Hammurabi⁶, and only in two instances survives to my knowledge into the Kassite period⁷. Thus it appears in Babylonia to be entirely dependent on influences from the north-west, which ultimately brought the "Amorite" First Babylonian Dynasty to power, the north-west where the motive survived at a much later date than in Mesopotamia and, as we must infer, existed earlier⁸. The distribution of the theme of the monkey-like imp marks the radiation, from a

¹ HOGARTH, *Hittite Seals*, nos. 151, 154, 166, etc.; CONTENAU, *op. cit.*, 28, 33, 147, etc.

² The monkey-like imp is different from the bow-legged dwarf to which Sir Arthur Evans drew attention as a motive on Babylonian cylinders (*J.H.S.*, 1897, 366). The imp always appears in profile, the dwarf always in front view except the head; he mostly accompanies the nude goddess. Our imp shows no predilection, but features mostly in presentation-scenes. Compare also such seals as WARD, *op. cit.*, 324, 428, and WEBER, *op. cit.*, 271, where both appear together. I would suggest from the position of our imp (always near the main god, mostly in front of his knees, often also grasped by him) that he personifies the evil of which the worshipper desires to be freed (compare the grasshopper on, e.g., DELAFORTE, *op. cit.*, D 56).

³ SEAGER, *Mochlos*, Fig. 42, see p. 90 above.

⁴ WARD-MORGAN, *op. cit.*, 229, 243; WARD, *op. cit.*, 844, 853, 888, etc.; CONTENAU, *op. cit.*, 45, 124, 150, etc.; WEBER, *op. cit.*, 271, 483, etc.

⁵ DELAFORTE, *op. cit.*, A 262, 274, 278, etc.

⁶ WARD-MORGAN, *op. cit.*, 74; DELAFORTE, *op. cit.*, 304, 323, 373, 454, etc.

⁷ WARD, *op. cit.*, 539; DELAFORTE, *op. cit.*, D 56.

⁸ It is curious that Dr. Contenau has not noticed that our motive serves admirably to characterise his "glyptique de transition," the existence of which he explains by the following passage: "Le fait marquant de l'époque d'Ur est la pénétration pacifique des influences de l'Ouest, prouvée dans la littérature par l'onomastique, et dans la religion par les acquisitions du panthéon chaldéen. Cette pénétration atteint son maximum avec la Première Dynastie de Babylone dont les représentants sont des Amorites. Il est tout naturel que l'art traduise ces influences: à côté de la glyptique traditionnelle de Chaldée, que nous trouverons

centre in North Syria or Eastern Anatolia, of influences which, at least in Babylonia and Egypt, were exercised by foreigners whose arrival caused no slight disturbance. In Egypt we found under the Sixth Dynasty the first signs of their approach in the unusual unrest on the eastern border, for which we could not hold the immediate neighbours of Egypt responsible. Now we see indeed that the moving power behind these tumults has to be looked for far beyond the Egyptian sphere of influence, and the events which caused such trouble to the Sixth Dynasty were only part of the far-spreading movement which affected the whole of the ancient world in the second half of the third millennium. It would by far surpass the scope of our inquiry if we were to determine the interrelations of the different migratory movements which characterise this period¹. It seems clear that they started beyond Taurus but found in North Syria a secondary centre from which they radiated farther towards west, south and south-east². It remains to specify what conclusions as regards Egypt we are entitled to draw from the material discussed in the foregoing pages.

Conclusions.

The archaeological evidence definitely proves that the growing Asiatic menace, which we could trace under the Sixth Dynasty, actually developed into a Syrian influx, as soon as the country was weakened by the beginning of those disorders amongst which the Old Kingdom perished. To what extent this foreign interference hastened the downfall is hard to say. Naturally, no regular conquest of the country took place—nothing of the kind is conceivable before the days of Assyria. One has to think of an ever-increasing infiltration of foreigners caused by the pressure in Asia, entering the Delta first, then spreading through the country in smaller or larger groups. Such infiltration, always hard to counteract, is absolutely irresistible when, in the affected country, the central government is breaking up. And this was actually the case. A few symptoms pointing in that direction were

jusque sous Hammurabi, et de la glyptique plus châtiée et plus uniforme en usage dans les territoires dépendants nettement de la Dynastie d'Ur, apparaît partout une glyptique reflétant ces influences de l'Ouest" (p. 59). But Dr. Contenau errs in following Dr. Hogarth by assuming that this transitional stage would lead up to a definite Syro-Hittite glyptic; it was just because the latter *existed already* that it could influence that of Babylonia (cf. p. 89, note 6, above). Indirect evidence of its existence comes both from Crete in the E.M. II-III periods (see p. 90 above), and from contemporary Egypt (button-seals and our two cylinders). All this evidence antedates considerably what the above-mentioned scholars wish to consider as the earliest stage of Syro-Hittite glyptic. An additional argument is provided by the close resemblance of glyptic objects, found definitely in Syria and probably of Syrian manufacture (*Journal*, VIII, Pl. XXIV, 1-6), to those belonging to the second Susian civilisation, and therefore hardly later than the first half of the third millennium.

¹ We cannot consider the complicated linguistic and racial problems involved in these migrations (see CHRISTIAN, *Mittel. Anthropol. Gesell.*, Wien, 1925, 188 ff.).

² It seems that the movement, started in the far north-east, upset on the one hand Babylonia (Gutium) and on the other North Syria, whence it radiated to the south and west. Thus in Crete we get stamp-seals, partly of foreign design and original shape (cylinders engraved on both ends instead of on the circumference), partly also of foreign shape (see p. 90, note 3, above). In Egypt stamp-seals appear for the first time, but cylinder-seals are also affected. The stamp-seals, always used in Cappadocia, point again beyond Syria to the source of the movement. The Egyptian cylinders discussed above and the Semitic names in Egypt show, however, that North Syrians were taking part in the movement towards the south, just as they continued to come into Babylonia during the subsequent centuries of settlement, and eventually founded the dynasty of Hammurabi.

already known¹. But now we may also refer to Ipuwer's "Admonitions," since archaeological evidence has shown that we may use it as a historical document². Here we find a vivid picture of Egypt suffering from the defects of over-ripe societies, corruption, disintegration of the central power, social revolution. At the same time it is an admirably clear picture of how the increasing chaos and the growing power of the foreigners went hand in hand. In Ipuwer's days, i.e. under Pepi II³, we find the situation already much more serious than an ordinary Bedawin raid, even when successful, could ever become⁴. The foreign elements, reinforced by the continuous arrival of new-comers, and compelled to find a living, had already become strong enough to do so to the detriment of the natives: "the foreigners have become Egyptians everywhere," and in the Delta one finds "those who knew it not like those who knew it, and the foreigners are skilled in the works of the Delta⁵." When Ipuwer speaks in this connection mainly of the Delta, it is because that was the most important part of the country. But at the same time he clearly indicates that the foreigners are "throughout the land⁶." And this is also testified beyond doubt by the button-seals, which are found in the Delta, and, in large numbers, in Middle Egypt (Kau el-Kebir), but occasionally even in graves as far south as Abydos, Dendera and even Nubia⁷. Of course the centre of gravity lay still in the north; the Seventh and Eighth Dynasties, according to Manetho, resided at Memphis. How far southwards their power extended is uncertain. But evidently the foreigners preponderated to such an extent, that eventually one of their houses ascended the throne, and asserted itself so strongly that, as the Eighth Dynasty, it entered into the official annals of Pharaonic Egypt.

Now the excavations at Byblos might give important information as to the nature of this foreign rule. If the temple there, destroyed under Pepi II, was rebuilt in the First Intermediate Period, one might assume that, ephemerally, a wide empire, embracing Syria as well as Egypt, was dominated by the barbarians. At present, our evidence is too slight to admit so far-reaching a conclusion⁸. On the contrary, one gets the impression that

¹ The nobles were buried round their king both under the First Dynasty (PETRIE, *Royal Tombs*, II, Pl. LVIII; *The Tombs of the Courtiers*, 1) and as late as the Fourth. Under the Fifth, their tombs are made in their own nomes; at the same time they seem more and more to become from high officials local rulers with territorial powers. At Sinai the records no longer mention only the name of the king, but the leaders of the expeditions inscribe their own as well, taking some credit for the achievement to themselves. Cf. BREASTED, *History*, 128-9; HALL, *Cambridge Ancient History*, I, 296.

² However suggestive Erman's argument for dating the original composition of the "Admonitions" under Pepi II was (*Sitzungsberichte der K. Pr. Akad.*, 1919, 813), its utilisation as an historical document of the First Intermediate Period was hardly possible, as the actual manuscript dated from the Nineteenth extent some centuries of tradition of a story may alter both its character and its contents beyond recognition. As in so many cases, the archaeological facts substantiate the literary evidence and reveal its true meaning.

³ See foregoing note.

⁴ *Admonitions*, 3, 1; 9, 6; 1, 9; 3, 14; 4, 5-8.

⁵ *Ibid.*, 4, 7-8.



⁶ *Ibid.*, 3, 1; also 1, 9 *et ubi*.

⁷ See p. 88, n. 5 above.

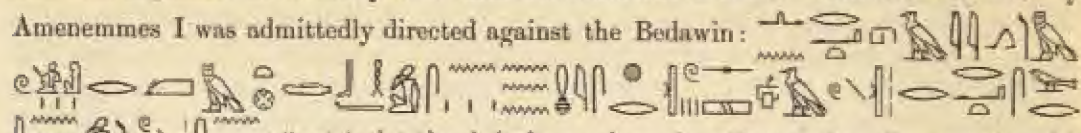
⁸ Prof. PETRIE wants to read this into the Khondy seal (*History*, I, 123): "the king is in Egyptian dress, but the Syrian before him receives *onkh*, life, from the king, and an Egyptian in the background is obviously an inferior subject." But we may not naively explain the scene as invented for this purpose, since the seal is so closely related to the Asiatic glyptic, and thus we must expect to find it subject to the conventions which rule the latter. In fact the scene is nothing but a variant of the "presentation scene" priest. And "one behind the other" may simply express "one beside the other," if it is to be considered an Egyptian composition. (See SCHAEFER, *Von Aegyptischer Kunst*, 148 f.)

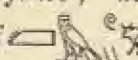
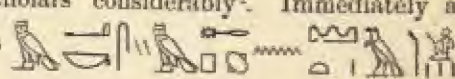
these Syrians possessed no authority outside Egypt and that there, as in Babylon, they rose to power in a country into which they had come to stay. Their cylinder-seals, as we have seen, try to dissimulate their foreign origin; their names are based on those of the Sixth Dynasty. They obviously tried to take root in their new country. This attempt, as we shall see in detail, failed; but just because they possessed no base in Asia, they perished, without, by their fall, giving rise to any foreign war. No greater contrast with the Second Intermediate Period is conceivable: then the rising and the war of liberation against the Hyksos develops into the long series of Asiatic enterprises of the Eighteenth Dynasty, originally nothing but a prolonged attack on the enemy's base, combined with the effort to secure the bridgehead on the other side of the Sinai desert. But this retaliation after the subjugation by a foreign power does *not* follow the First Intermediate Period: the Middle Kingdom interferes in Palestine as little as the Old Kingdom did; that is definitely shown, both by the finds in that country and by the Sinuhe story¹. And the literary texts which speak about the struggles with Asiatics during the restoration of the Ninth-Eleventh Dynasties are fortunately very lucid as to their character and power. The striking characteristic which the father of King Merykerā gives us of his foreign adversaries applies to none but the unruly nomads of the desert². Moreover, the contempt which

¹ This is clearly seen in Sinuhe's Song of praise to Sesostri I (l. 71), where the Asiatic countries (northlands) are specifically mentioned as belonging to a different sphere of influence from the Bedawin, whom Sesostri, in contrast with the first, is going to attack. Sin. 222 does not contradict this, as it is nothing but a flattery in a letter to the king. Neither does the stele of Sebekhu (GARSTANG, *El Arabah*, Pls. IV, V, and PEET, *Manchester Museum Publications*, no. 75, p. 20 especially) prove any Middle Kingdom enterprise in Asia. Very clear and consistent evidence is given by Sinuhe's story as well as by the actual finds in Palestine. There can be no doubt that Sinuhe passed his exile in Palestine, though the mention of Byblos, between his passing the Delta-frontier and the eastern desert and his final settling down, is confusing. But *Byblos* suggests here simply *Asia* to the average reader, who certainly did not possess sufficient geographical knowledge to be troubled by topographical inconsistencies; it was the only Syrian place-name known to every Egyptian. However, nobody acquainted with Palestine as well as with the mountainous, but rich and cultured hinterland of Beyrout, can doubt for a moment in which of these two regions Sinuhe tried to make the best of his life after his panic flight. He found there other Egyptian wretches who, as we may infer and as the archaeological evidence makes probable, had also fled the wrath of the Pharaoh. Consequently they must have considered themselves there out of his reach, which they would certainly not have been if Egypt pretended to any kind of sovereignty over the country. All the same they were near enough to keep posted about matters at home, and to know when a request to be pardoned would be likely to meet with success. Now the actual finds made in Palestine may best be explained in exactly the way suggested by Sinuhe's story; except at Mutesellim, where some Twelfth Dynasty scarabs appear as it seems in native tombs (exiles may have been compelled to dispose of those as Russian Tsarists now sell their jewels), we find (e.g. at Gezer) little groups of funerary monuments and remains, such as one cannot explain by trade and would expect of Egyptian exiles buried abroad; it is absurd to see in them colonial officials; those would have had their bodies transported to Egypt, as we know that burial abroad was very much feared. Finally, the rarity of Twelfth Dynasty remains in Palestine contrasts most strikingly with periods in which Egypt really had influence in the country, e.g. Hyksos period and Eighteenth Dynasty. (SCHUMACHER, *Tell el-Mutesellim*, 15, Pl. V, Abb. 10, cf. p. 21, Fig. 18; MACALISTER, *Gezer*, II, 303, 308, 311 f.)

² GOLENISCHEFF, *Les Pop. hiératiques*, nos. 1115, 1116 A et B de l'Ermitage Impérial de St. Pétersbourg, 1913, Pl. XII, 91-94. The description of their home-land can be applied to the Sinai desert and the El-'Arish region;   "inconvenient in respect of water," may either refer to the sudden floodings of the coast-regions, or to the lack of water which characterizes the region of the interior. But the whole passage is perhaps an interpolation of a later copyist, who referred to Syria, then well known in Egypt.

speaks out of this text, and which reminds one of the proud language of Sesostri's III's Semnah stele, excludes, as completely as does the latter, the existence of a formidable antagonist with organised territorial power. And the construction of the "Wall of the Prince" by Amenemmes I was admittedly directed against the Bedawin:

 "not to let the Asiatics go down into Egypt, that they may beg for water in the destined way to give their cattle to drink". This reference to an age-old practice characterises those against whom the measure is directed as the Bedawin of the eastern desert. Throughout there is not a single indication of the existence of any other enemy.

All these different indications make it clear that the Eighth Dynasty cannot have wielded any power outside Egypt; thus its decline was entirely an internal Egyptian matter. Nevertheless the energetic measures against the Bedawin on the eastern frontier which characterise the restoration seem to be connected with the overthrow of the Eighth Dynasty. This connection is suggested by an obscure passage in the "Instructions for King Merykerē", which has puzzled scholars considerably². Immediately after the mention of  Athribis³, comes  "behold it is the navel-string of the foreigners".

Our foregoing discussions now allow us to utilise this important utterance. We know that the Heracleopolitan princes, of which Merykerē was one, formed the Ninth and Tenth Dynasties of Egyptian kings; consequently, they must have displaced the Syrian princes who formed the Eighth. This displacement was naturally not effected without resistance on the part of the latter, and it seems that it was actually Merykerē's father who drove them from Memphis, for the same obscure passage suggests that he possessed at Saḫḫārah, in the pyramid-town of King Teti, Dadesut, a stronghold on which he relied⁴. The Eighth Dynasty, expelled from the capital, seems to have retired northwards to Athribis in the south-eastern Delta. The choice of this town as a temporary capital can well be understood. In Athribis, as still in modern Benhâ, the roads from north and east converge towards the south; through Wādī Ṭumilât, as well as *via* the modern El-Ḳanṭarah, they could summon to their aid auxiliaries from among those wandering desert-tribes with whom they themselves were to some extent connected by descent. And Merykerē's father, the Heracleopolitan king, who obviously did not succeed in conquering this town, found in his anger the most accurate and most graphic description of the situation, calling Athribis the navel-string of the Barbarians. It may be that the same energetic king had already tried to cut off the passage of the eastern Delta. If so, he did not succeed; he claims to have fixed his boundary from "Hebenu to the Horus-way", *i.e.* to Wādī Ṭumilât in the

¹ Golenischeff, *op. cit.*, Pl. XXV, 66-68.

² Gardiner, *Journal*, I, 31; ERMAN, *Literatur der Aegypter*, 116, n. 5.

³ Gardiner, *ibid.*, 31, n. 3.

⁴ See Gardiner, *ibid.*

⁵ Golenischeff, *op. cit.*, Pl. XII, 99.

⁶ Golenischeff, *op. cit.*, Pl. XII, 88-89. To the east of Middle Egypt the trouble may have been caused by the Asiatics whom we noticed entering the region between the Nile Valley and Red Sea under Pepi II, and still there under the Eleventh Dynasty (see above, p. 82, n. 3, and the scenes in the Eleventh Dynasty temple at Dêr el-Bahrî, NAVILLE, Pls. XIV, XV; *cf.* also similar scenes in tombs at Beni Ḥasan).

south-eastern corner of the Delta; farther north, at El-Ḳanṭarah, Asiatics could therefore still pass. The Heracleopolitans, harassed by the Thebans in the south, could not achieve what they had undertaken. Only after the unification of Egypt under Amenemmes I did the work reach its completion, as we know, by the construction of the "Wall of the Prince." At what moment in the course of the internal wars Athribis fell we do not know. As we have seen, its surrender inevitably brought with it the disappearance of the Eighth Dynasty. Thus its decline is part of that long series of struggles for hegemony the last of which, that between Thebes and Heracleopolis, we are only able to follow; its rise, however, was ultimately caused by the extensive movements of peoples which so largely changed the aspect of the ancient Near East in the latter part of the third millennium.

ALIMENTARY CONTRACTS FROM TEBTUNIS

BY A. E. R. BOAK

In a previous number of the *Journal* (IX, 1923, pp. 164-7) I gave a description of P. Mich. no. 622, a long roll which contains on its verso the ἀναγραφὴ γραφ(ε)ίου Τεβτύνεως καὶ Κερκε(σούχων) Ὅρο(υς) for the last three months of the Egyptian year 41/42 A.D. There I pointed out that the recto of the same roll contained a register of abstracts of contracts which corresponded to nos. 1 to 50 of the 247 entries on the verso. Of these fifty abstracts five belong to the class of so-called Alimentary Contracts or συνγραφαὶ τροφίτιδες. So far as I am aware no Greek text of such contracts has as yet been published. Accordingly it seems worth while to edit these, giving the full text and translation of each, with a brief discussion of some of the problems which they raise.

I.

COL. IIb.

- 1 Συνγραφ(αφῆς) τροφίτιδος(ς) ἀργ(υρίου) χρυσῶν κα(αὶ) τὴν ἀποστασί(ου) καὶ προ-
πῶσιν, κα(αὶ) ἐξομολογ(οῦμεν) ἀπομεμερικέναι τῷ προγεγραμμέν(ω) ἡμῶν νύ(ω) Διο-
νυσί(ω) μετὰ τὴν ἡμῶν τελευτὴν ἀρτίως τὸν ὑπάρχοντά μοι περὶ Θεογονίδαν κλῆρον
κατοικι(κὸν) (ἀρουρῶν) ἢ κα(αὶ) πρὸς ταύταις ἐπι[κατ]εσχήμενης γῆς (ἡμισυ τέταρτον)
- 2 (ἀρούρας) ὥστε | εἶναι ἐπὶ τὸ αὐτὸ ἀρούρας ὅκτ(ω) ἡμῖσον τέταρτον ἢ ὅσ(ων) ἐὰν ὦσι ἐν
τέταρσι σφραγίδ(ε)σι. τῆς μὲν (πρώτης) σφραγίδ(ος) (ἀρουρῶν) γ πατρι(κῶν) (ἀρουρῶν)
ὧν γίτο(ε)ς νό(του) Ψενοσίρεος κλῆ(ρος), βορρ(ᾶ) Πατύνι(ος) ἀδ(ε)λφ(ου) κλῆ(ρος), λιβ(ος)
προσοδικ(ᾶ) ἐδάφ(η), ἀπ(ηλιώτου) γύης δημόσιος, τῆς δὲ δευτέρ(ας) σφραγίδ(ος) ἢ
- 3 εἰ[στι]ν (ἀρουρῶν) βλδ ὧν γίτο(ε)ς καὶ τούτων | νό(του) Θεχνούτο(ς) τῆς Μάρωνο(ς) κλῆ-
ρος βορρ(ᾶ) νύ(ω) Θασίτο(ς) τῆς Ἡρακλῆου κλῆρος, λιβ(ος) Ψενοσίριος τ[οῦ] Διου[ν]υσί(ου)
κλῆρος, ἀπ(ηλιώτου) Ἡρακλίδ(ου) το(ῦ) Πάπου κλῆρος, τῆς δὲ (τρίτης) σφραγίδ(ος)
ἢ ἐστίν (ἀρούρης) ᾧ, νό(του) καὶ ταύτης Ταμάρωνο(ς) τῆς Μάρωνο(ς) κλῆρος, βορρ(ᾶ)
- 4 νύ(ω) Θασίτο(ς) τῆς Ἡρακλίδ(ου) κλῆρος, λιβ(ος) Ἀκουσι(λάου) τοῦ | <(του)> Ἀπολλω-
νί(ου) κλῆρος, ἀπ(ηλιώτου) Ψενοσίριος τοῦ Διονυσίου κλῆρος, τῆς δὲ τετάρτης σφρα-
γίδ(ος) αἱ λοιπ(αὶ) [(ἀρουραι)] β, ὧν γίτονο(ς) καὶ τούτων νό(του) προσοδικ(ᾶ) ἐδάφ(η),
βορρ(ᾶ) δημόσιον ἔδαφ(ος), λιβ(ος) Ὀρσεύτο(ς) το(ῦ) Πετεπμουεῖτος κλῆρος, ἀπ(ηλιώτου)
- 5 Ψενοσίριος τοῦ Διονυσίου κλῆρος, κα(αὶ) ἀπὸ τοῦ ὑπάρχοντός μοι | ἐν Ταλί τῆς αὐτῆς
μερίδ(ος) πατρικὴν οἰκίαν καινὴν β στέγον ἐν ἣ κατάγαιον καὶ αὐλ(η)ν ἐκ τῶν πρὸς
νότο(ν) μέρους, κα(αὶ) ἐν τῇ αὐτῇ Ταλί ἐτέρα(ς) σφραγίδ(ος) L μέρος βί[κ]ου ἐν]ὸς ἡμῖσον
κοινού καὶ ἀδιερέτου ἐν τῇ λεγομένῃ Ἀραβάκιος ἔπαυλει, κα(αὶ) ὁμοίως τῷ αὐτῷ |
- 6 νύ(ω) Διονυσί(ω) ἐν τῇ Ταλεῖ ἐν ἐτέρας σφραγίδ(ος) ἀπὸ τοῦ ὑπάρχοντος) Ψιλὸν
τόπων [βί]κους β ἀπὸ βί[κ]ων τεττ(ᾶ)ρων κοινῶν κα(αὶ) ἀδιερέτων πρότερον Ἡρακλεῖτος
Λάξου, κα(αὶ) ὁμ[οίως] τῷ αὐτῷ Διονυσί(ω) κα(αὶ) κατὰ τὸ L μέρος ὧν ἐὰν καταλίψ(ω)
- 7 κτηνῶν παντοίων καὶ ἐπιπλόων | καὶ ἐνδομενίας κα(αὶ) ἐνοφιλομένων πάντων, κα(αὶ) ὧν
ἐὰν ἀπὸ τοῦ [νύν] ἐπικτήσομαι ὑπαρχόντων πάντων μοι ὁμοίως τῷ αὐτῷ νύ(ω) Διону-
σί(ω) καθ' ὃν δέποτε οὖν τρόπον κατὰ τὸ L μέρος. ἢ ἐστίν ἡ δεδομένη(η) φε(ρνή) ἀργυ-

8 ρ(ίου) (δραχμῶν) σ κ(αί) παρίφερν(α) ἀπὸ τοῦ δι' αὐτοῦ | ἐνόδι(ον) χρυσοῦν (τετάρτων)
 δ κ(αί) μηνίσκιον χρυσοῦν (τετάρτων) β κ(αί) δακτύλιον χρυσοῦν (τετάρτης) α λ
 κ(αί) δακτ(ύλιον) ἀργ(υροῦν) ὀλκῆ(ς) ἀσήμου (δραχμῶν) β κ(αί) ψελίω(ν) ἀργ(υρῶν)
 ξεῦγο(ς) ὀλκῆ(ς) ἀσή(μου) (δραχμῶν) ις κ(αί) κλάριον ἀργ(υροῦν) β ὀλκῆς ἀσήμου
 (δραχμῶν) η κ(αί) σκάφιδ(α) χ(άλκεα) β ὀλκ(ῆς) μν(ῶν) ζ κ(αί) ἐδρύση χ(άλκεα) β
 9 κ(αί) γυνεκῦ(α) σκεῦη κασιδέρ(ι)ν(α) ὀλκ(ῆς) μν(ῶν) ε κ(αί) ἔρισκ(ον) | ξύλινον κ(αί)
 στολὰς γυν(αικείας) β, μια(ς) μὲν βαπτῆς τῆς δὲ δευτέρας λευκῆς, κ(αί) πάλλια δ
 συμμικταῖς χρώμασι, κ(αί) ἐν προσφορ(ᾷ) ἀπὸ τοῦ δι' αὐτ(οῦ) τοῦ ἰσιόντος (ἔτους)
 τὴν ὑπαρχούσῃν αὐτῇ ἐπικατεσχημένῃ(ν) γῆν [ἀρούρης] | ᾧ ἀπὸ ἀρουρ(ῶν) β ἡ
 10 ὁσῶν ἐὰν ὦσι ἐν μιᾷ σφραγίδι κοινῶν κ(αί) ἀδιερετῶν | πρὸς τὸν ἑαυτῆς ἀδε(λφόν)
 Χαιρήμων(ος) περὶ Ταλεῖ ἐν τῷ Λεοντίσκου λεγομένῳ κλήρ(ω). ἣν ποιεῖται Πετσῖρις
 Φαμουνιο(ς) μη(τρὸς) Ταώπιος ὡς (ἐτῶν) ν ο(ὕλῃ) ἀντικ(νημίῳ) δε(ξιῳ) καὶ ἡ γυνή
 μου Θαῆσις Ψουσνέ(ως) μη(τρὸς) Ἐγγερμινιο(ς) ὡς (ἐτῶν) ν ο(ὕλῃ) μετόπ(ω) ἐκ δε(ξιῶν) ὑπὸ
 11 τριχ(ὸς) Θεναμοῦνι Μαρρῆ(ος) μη(τρὸς) Ἄμουνιος | ὡς (ἐτῶν) κ ο(ὕλῃ) γό(νατι) δε(ξιῳ)
 οὔσῃ τῇ τοῦ νιοῦ αὐτῶν Διονυσίο(ν) γυναι(κί). ὑπογρ(αφεύς) Ἀπολλ(ώνιος) ὡς (ἐτῶν)
 μ ο(ὕλῃ) καρπῷ χι(ρὸς) δε(ξιᾶς), τῆς ἄλλης Ὀυν(ῶφρις) Πακῆβκ(ιος) ὡς (ἐτῶν) λβ
 ο(ὕλῃ) γό(νατι) δε(ξιῳ). τὰ ἄλλα ἀκ(ολουθῶς).

1. *συνγρ τροφίτιδ(ος)*. As Professor Hunt writes me, one has to read *συνγρ(αφῆς) τροφίτιδ(ος)*, but the genitive should be accusative, as we see from the analogy of the following phrases. The reading *συνγρ(αφῆν) τροφίτιδ(ος)* seems to be ruled out by the corresponding entry on the verso (for which see below), where the adjective agrees with *συνγραφῇ* and not with *γυναῖκός* understood, which would be translated "of a woman of revenue."

3. Ἡρακλίδ(ου), probably an error for Ἡρακλῆου, as above.

5. β στέγον = δίστεγον (Hunt).

6. ἐν ἐτέρας σφραγίδ(ος), for ἐν ἐτέρᾳ σφραγίδι. ψιλὸν for ψιλῶν.
 καταλίψ(ω) for καταλείψω.

7. ἐπικτήσομαι for ἐπικτήσωμαι.

ἡ ἴστιν, a mistake for καὶ ἴστιν. ἀπὸ τοῦ δι' αὐτοῦ: for this I can find no parallel.

8. ἔρισκ(ον) for ὑρίσκ(ον) = ὑρίχον (Hunt). Professor Hunt also suggests that *ἐδρύση* may have been written for *ἐδρύση* and mean a vessel for water.

9. αὐτῇ for αὐτῇ.

10. Χαιρήμων(ος), gen. for accus.

The corresponding entry in Col. II, l. 6 of the *ἀναγραφῇ* on the verso falls, among other entries, on the 16th of the month Germanikeios. It reads as follows:

συνγρ(αφῇ) τροφίτις Πετσίριος(ς) κ(αί) ἀλλῶ(ν) πρὸς Θεναμοῦ(ν) χρυσῶν κα.

TRANSLATION.

Alimentary contract for money of the value of 21 gold pieces, and the contract of surrender and preliminary sale; and we affirm that we have bequeathed to our aforesaid son Dionysios for immediate possession after our death the allotment of catocic land which belongs to me in the neighbourhood of Theogonis, eight arouras, and besides these three-fourths of an aroura of land with a further claim on it, making altogether eight and three-fourths arouras, or however many there may be in four parcels; and in the first parcel three arouras of the arouras inherited from my father of which the neighbours are: on the south the allotment of Psenosiris, on the north the allotment of Patunis his brother, on the west revenue estates, on the east a public field; and in the second parcel, which is of two and three-fourths arouras of which the neighbours are: on the south the allotment of Thenaus, daughter of Maro, on the north the allotment of the sons of Thasis, daughter of Herakleides,

on the west the allotment of Psenosiris, son of Dionysios, on the east the allotment of Herakleides, son of Papos; and in the third parcel, which is of one aroura, the southern neighbour is the allotment of Tamarron, daughter of Maro, on the north the allotment of the sons of Thasis, daughter of Herakleides (?), on the west the allotment of Akousilaos, son of Apollonios, on the east the allotment of Psenosiris, son of Dionysios; and from what belongs to me in Tali, of the same section, a new house inherited from my father of two storeys in which is a cellar and a court on the south part; and in the fourth parcel the remaining two arouras of which the neighbours are: on the south revenue estates, on the north a public estate, on the west the allotment of Orseus, son of Petepmouis, on the east the allotment of Psenosiris, son of Dionysios; and in the same Tali of another parcel a half share of one and one half bikoi common and undivided in the so-called square of Arabakis; and likewise to the same son Dionysios in Tali in another parcel from vacant plots which belong to me two bikoi from four bikoi formerly belonging to Heraklas, son of Laxsos; and likewise to the same son Dionysios also up to the half share of whatever I may leave of cattle of all sorts and movables and household furnishings and all that is owing to me; and whatever property also I may acquire from now on, to the same son Dionysios in every possible way up to the half share.

And the dowry given is two hundred drachmas of silver, and as parapherna from her personal belongings (?) a golden earring of four quarters and a golden lunette of two quarters and a gold ring of one and a half quarters and a silver ring of a weight of two drachmas of uncoined metal and a pair of silver armlets of a weight of sixteen drachmas of uncoined metal and two silver bracelets of a weight of eight drachmas of uncoined metal and two bronze bowls of a weight of seven minas and two bronze water jars (?) and women's utensils of tin of a weight of five minas and a wooden basket and two women's robes, one dyed and the other white, and four cloaks of various colours.

And in gift from her personal belongings (?) in the coming year the same additionally acquired land which belongs to me, one aroura from two arouras or however many there may be common and undivided in one parcel adjacent to (?) her brother Chairemon at Tali in the so-called allotment of Leoniskos.

Which contract Petsiris, son of Phamounis, his mother being Taopis, about fifty-five years old with a scar on his right shin, and my wife Thaësis, daughter of Psosneus, her mother being Egerminis, about fifty years old with a scar on her forehead on the right side below the hair, make with Thenamounis, daughter of Marrés, her mother being Amounis, about twenty-eight years old with a scar on her right knee, who is the wife of their son Dionysios.

Signatory Apollonios, about forty years old, with a scar on the wrist of his right hand, and for the other party Onnophris, son of Pakebkis, about thirty-two years old, with a scar on his right knee.

And the rest in conformity.

II.

COL. IIIa.

- 1 συνηγ(αφῆς) τροφέτιδο(ς) ἀργ(υρίου) χρυσῶν τὰ καὶ τὴν ἀποστασί(ου) καὶ προπρᾶ-
σιν, καὶ τοῦ ἐπιβάλλοντός μου μητρικοῦ μέρους οἰκί(ας) καὶ αὐλῆν καὶ τῶν συνκυρού-
των πάντων ἐν Τεβ(ύν)ει τῆς Πολέμωνο(ς) μέριδο(ς), ἔτι δὲ καὶ (ᾧν) ἀπὸ τοῦ νῦν
2 ἐπικτήσονται | ὑπαρχό(ντων) καὶ κληρῶν καὶ δουλ(ικῶν) σωματίων καὶ ἐπιπλόων

κ(αι) ἐνδομενείας καθ' ὃν δῆπο(τε) οὖν τρόπον. ἔστιν δὲ ἡ δεδομένη φερνὴ ἀρχ(υρίου)
(δραχμῶν) ξ καὶ παράφε(ρνα) ἀπὸ τοῦ δι' (αὐτοῦ) ἐνοδ(ίων) χρ(υσῶν) ζε(ῦγος) (τετάρ-
των) γ κ(αι) μη(νίσκος) χρ(υσοῦς) (τετάρτης) αλ κ(αι) ψέλια ἀρχ(ύρεα) ὀκκ(ῆς) ἀσή(μου)
(δραχμῶν) η κ(αι) σκάφιο(ν) χ(αλκοῦν) κ(αι) ἐδρ(υσή) χ(άλκεα) β κ(αι) κασιδέ(ρινα) |
3 ὀκκῆ(ς) μυ(ῶν) β. ἥν ποιεῖται Πατῦν(ις) Κρονίωνο(ς) μη(τρός) Σουήρειος ὡς (ἐτῶν) μ
ο(ῦλῃ) μή(λω) ἀρ(ιστερῶ) γυναικὶ Θατρῆτι Νικο(μήδου) μη(τρός) Θωμη..... ὡς (ἐτῶν)
κς ο(ῦλῃ) μετόπ(ω) μέσῳ ὑπὸ τριχ(ός). ὑπογρ(αφένς) Πτο(λεμαῖος) Χαιρή(μωνος) ὡς
(ἐτῶν) οε ο(ῦλῃ) ὑπ(ὸ) ἀγκ(ώνος) ἀρ(ιστεροῦ) κ(αι) τῆς ἄλλῃ(ς) Ἡρακλίδ(ης) Ὀρίωνο(ς)
ὡς (ἐτῶν) ξ ο(ῦλῃ) τάρσῳ ἀριστερῶι. τ(ὰ) ἀλ(λα) ἀκ(ο)λουθῶς.

1. καὶ τοῦ ἐπιβ. : elsewhere κατὰ τοῦ etc.

μυν for μαι.

αὐλῆν for αὐλῆς.

ἐπικτήσονται for ἐπικτήσῃμαι.

3. Θωμη ὀλιδ.

The corresponding entry in the ἀναγραφὴ on the verso is in Col. II, l. 15, under the date of Germani-
keios 19. It reads :

συνγρ(αφή) τροφίτις Πατῦνις πρὸς Θατρῆν χρυ(σῶν) ιι.

TRANSLATION.

Alimentary contract for money of the value of eleven pieces of gold, and the contract of
surrender and preliminary sale in respect of my share inherited from my mother of a house
and court with all their appurtenances in Tebtunis of the division of Polemon, and also in
respect of (whatever property) I may acquire from the present time, both allotments and
slaves and movables and household furnishings in any way whatsoever.

And the dowry given is sixty silver drachmas, and as parapherna from her personal
belongings a pair of gold earrings of three quarters, and a lunette of gold of one and a
half quarters, and silver armlets of a weight of eight drachmas of uncoined metal, and a
bronze bowl, and two bronze water jars (?), and (women's utensils) of tin of a weight of two
minas.

Which contract Patunis, son of Kronion, his mother being Soueris, about forty years
old with a scar on his left cheek, made with his wife Thatres, daughter of Nikomedes, her
mother being Thom....., about twenty-six years old with a scar in the middle of her
forehead below the hair.

Signatory Ptolemaios, son of Chairemon, about seventy-five years old with a scar
beneath the left elbow, and for the other party Heraklides, son of Horion, about sixty years
old, with a scar on the sole of the left foot.

The rest in conformity.

III.

COL. IIIg.

- 1 κδ συνγρ(αφῆς) τροφίτιδο(ς) ἀρχ(υρίου) χρυσ(ῶν) κ̄α κ(αι) τὴν ἀποστασί(ο)ν κ(αι)
προπρᾶσιν, κατὰ τῆς ὑπαρχο(ύσης) ὅλης τῆς οἰκίας κ(αι) αὐλῆ(ς) κ(αι) τόπ(ου) ἐν
Τεβτ(ύνει) ἐν μυ(ᾶ) σφραγίδ(ι) (πρότερον) Ὀρσενο(ύφιος) το(ῦ) Ὀρουάγχι(ος) κ(αι)
κατὰ τῶ(ν) ἐπιβαλ(λόντων) πατρικ(ῶν) μερῶν ἑτέρας οἰκίας κ(αι) αὐλῆς ὁμοίως ἐν |
2 Τεβτῦνι κ(αι) καθ' ὃν ἐὰν ἀπὸ το(ῦ) νῦν ἐπικτή(σομαι) ὑπαρχ(όντων) πάντ(ων)
κληρ(ῶν) κ(αι) ἀμπε(λώνων) κ(αι) παραδ(είσων) κ(αι) οἰκοπ(έδων) κ(αι) κτην(ῶν) παν-

τοῖω(ν) κ(αὶ) δο(υλικῶν) σωμάτ(ων). κ(αὶ) ἐπιπλό(ων) κ(αὶ) ἐνδομεν(ίας) κ(αὶ) ἐνοφιλο-
 (μένων) πάντων καθ' ὃν δῆπο(τε οὖν) τρόπ(ον) ἢ κ(αὶ) ἐλευσομέν(ων) εἰς μαι ἀφ' οὗ
 3 δῆποτε οὖν τρόπ(ον). ἔστιν δὲ ἡ δεδο(μένη) φειρ(νῆ) ἀργ(υρίου) (δραχμῶν) τ κ(αὶ)
 παράφειρ(να) ἀπὸ τ(οῦ) δι' (αὐτοῦ) ἐνὸδ(ια) χρ(ύσεα) (τετάρτων) γ κ(αὶ) μ(ηνίσκος)
 χρυσο(ῦς) (τετάρτων) β κ(αὶ) ψέλλ(ια) ἀργ(ύρεα) ὀλκῆ(ς) ἀσῆ(μου) (δραχμῶν) ιβ κ(αὶ)
 σκάφιο(ν) χ(αλκῶν) κ(αὶ) γυναικ(εῖα) σκεῖη κασιδέριν(α) ὀλκ(ῆς) μιν(ῶν) ε. ἐπὶ δὲ
 4 τῶν προσενευχ(θέντων) συγγρ(αφῆ) ὑπαρχο(ῦσα) ὑμῖν. | ἦν ποιεῖται Πετесоῦχ(ος)
 Ἀρμιούσιο(ς) μη(τρὸς) Τερῶτο(ς) ὡς (ἐτῶν) μς ο(ὕλῃ) ὀφρ(ύει) δε(ξιῶ) γυν(αικί) Θαν-
 β(άστι) Ὀρσεῦτος μη(τρὸς) Θάσιτος ὡς (ἐτῶν) λς ο(ὕλῃ) ἀντικ(νημίω) δε(ξιῶ). ὑπο-
 γρ(αφ)εὺ(ς) Πτολ(εμαῖος) ὡς (ἐτῶν) λβ ο(ὕλῃ) τραχ(ήλῃ) δε(ξιῶ). τὰ ἄλλα ἀκ(ο)λου-
 θ(ῶς).

1. ἀ = πρότερον.

2. μαι for με.

3. ὑμῖν for ἡμῖν.

The corresponding entry on the verso is in Col. III, l. 1, under the date Germanikeios 24. As this is the first entry under that date, the date is entered in the left-hand margin. The entry reads as follows:

καὶ συγγρ(αφῆ) τρο(φίτις) Πετесо(ύχου) πρό(ς) Θανβάστιν χρυσῶν ζα.

TRANSLATION.

(Germanikeios 24th.) Alimentary contract for money of the value of 21 pieces of gold and the contract of surrender and preliminary sale transfer for money; concerning the whole house which belongs to me and the court and the plot of ground in Tebtunis in one parcel formerly belonging to Orsenouphis, son of Herouanchis, and concerning the shares which came to me from my father of another house and court likewise in Tebtunis, and concerning whatever property I may acquire from the present time allotments and vineyards and groves and building sites and cattle of all sorts and slaves and movables and household furnishings and all that is owing to me in any way whatsoever, or may come to me from any source whatsoever.

And the dowry given is three hundred silver drachmas, and as parapherna from her personal belongings gold earrings of three and a half quarters and a golden lunette of two quarters and silver armlets of a weight of twelve drachmas of uncoined metal and a bronze bowl and women's utensils of tin of a weight of five minas.

And concerning what was brought to me we have a contract. Which contract Petesouchos, son of Harmiousis, his mother being Teros, about forty-six years old with a scar on his right eyebrow, made with his wife Thaubastis, daughter of Orseus, her mother being Thasis, about thirty-six years old with a scar on her right shin.

Signatory Ptolemaios about thirty-two years old with a scar on the right side of his neck.

The rest in conformity.

IV.

COL. III.

1. συγγρ(αφῆς) τροφίτιδος ἀργ(υρίου) (χρυσῶν) ια καὶ τὴν ἀποστασί(ου) καὶ προπρᾶ-
 σιν, κατὰ τοῦ ὑπάρχο(ντος) περὶ Τεβτ(ύνιν) κλήρο(ν) κατοικ(ικου) (ἀρουρῶν) β κ(αὶ)
 περὶ Κερκεσουχ(ῶν) Ὀρους το(ῦ) ὑπάρχο(ντος) φυλακ(ι)τικ(οῦ) κλήρο(ν) (ἀρουρῶν) γ
 κ(αὶ) περὶ τὴν αὐτὴν κώμην Κερκεσουχ(ῶν) Ὀρους ζ (ἀρουρῶν) κλήρο(ν) (ἀρουρῶν) γλδ

- 2 κ(αὶ) ἐν τῇ αὐτῇ κώμῃ | μέρη πατρ(ι)κῆς οἰκίας κ(αὶ) ἐθρίο(ν) κ(αὶ) τῶν ἐτέρων
σφραγίδων ἐν τῇ αὐτῇ κώμῃ πατρικ(ῆς) ἐπαύλει(ως), κ(αὶ) καθ' ὧν ἐὰν ἄλλω(ν) ἀπὸ
τοῦ νῦν ἐπικτή(σομαι) ὑπαρχό(ντων) πάντ(ων) κ(αὶ) ἐπιπλό(ων) κ(αὶ) ἐνδομενί(ας) κ(αὶ)
3 ἐνοφιλομένων πάντων καθ' ὃν δῆπο(τε) οὖν τρόπ(ον). ἔστιν δὲ ἡ δεδο(μένη) | φε(ρνή)
ἀργυρίου) (δραχμῶν) ξ ἐν αἷς κ(αὶ) κ(αὶ) προσφό(ρας) ἀπὸ τοῦ δ(ι' αὐτοῦ) ἐνόδι(ον)
χρυσ(ῶν) (τετάρτων) β κ(αὶ) μην(ίσκος) χρυσ(οῦς) (τετάρτων) ε καὶ ψέ(λια) ἀργ(ύρεα)
ἄλλ(ῃς) ἀσ(ή)μου) ((ξενύγο(ς) ἐνο(δίων))) (δραχμῶν) η. ἣν ποιεῖται Ἡρώδη(ς) ὁ κ(αὶ)
'Ορσενο(ύφης) Ἡρώδο(ν) ὡς (ἐτῶν) λη ο(ὐλή) δακ(τύλῳ) (πρώτου) χιρ(ό)ς ἀριστερ(ᾶς)
γυναικὶ Θενχορηφίς Ὁρσεῦτο(ς) μη(τρὸς) Ταπνεβτ(ύνιος) ὡς (ἐτῶν) λ ο(ὐλή) μετόπ(ω)
4 μέ(σῳ). | ὑπογρ(αφεύς) Διόδωρο(ς) ὡς (ἐτῶν) μζ ο(ὐλή) μετόπ(ω) μέ(σῳ), τῆς ἄλλῃ(ς)
Πύρρο(ς) ὡς (ἐτῶν) μ ο(ὐλή) δακ(τύλῳ) λιγ(ανῶ) χιρ(ό)ς δε(ξιᾶς). τ(ὰ) ἄλ(λα) ἀκ(ο-
λουθῶς).

1. χρυσῶν, restored from the corresponding entry on the verso, and from analogy with the other abstracts.

2. μερῶ: possibly incorrectly for $\mathbf{\bar{\Lambda}}$ μερῶν. ἐθρίο(ν) for αἰθρίο(ν).

3. ξενύγῃ ἐνο. A mistake of the copyist. Possibly it should have been inserted above instead of ἐνόδι(ον).

4. λιγ(ανῶ) for λιχ(ανῶ).

The corresponding entry on the verso is in Col. III, l. 6, under the date of Germanikeios 25. It reads:

συνγρ(αφή) τροφίτης Ἡρώδο(ν) πρῶ(ς) Θενχορηφίην χρυσῶν ια.

Here Θενχορηφίην is obviously a mistake for Θενχορηφίην which appears in l. 3 of the text on the recto.

TRANSLATION.

Alimentary contract of money of the value of eleven pieces of gold and the contract of surrender and preliminary sale concerning the catocic allotment which belongs to me at Tebtunis of two arouras and at Kerkessouchon Oros the police allotment of three arouras which belongs to me, and at the same village of Kerkessouchon Oros three and three quarters arouras of an allotment of seven arouras, and in the same village the shares of a house and an unroofed court, and of the other parcels in the same village the stable inherited from my father, and concerning whatever else I may acquire from the present, all that belongs to me, both movables and household furnishings and all that is owing to me in any way whatsoever.

And the dowry given is sixty drachmas of silver, including a robe, and as gifts (πρόσφοραι) from her personal belongings a golden earring of two quarters and a golden lunette of five quarters and a pair of silver armlets of a weight of eight drachmas of uncoined metal.

Which contract Herodes, also called Orsenouphis, son of Herodes, about twenty-eight years old with a scar on the forefinger of his left hand, made with his wife Thenchoraphis, daughter of Orseus, her mother being Tapnebtunis, about thirty years old with a scar in the middle of her forehead.

Signatory Diodorus, about forty-seven years old with a scar in the middle of his forehead, and for the other party Pyrros, about forty years old, with a scar on the pointer finger of his right hand.

The rest in conformity.

V.

COL. IVd.

¹ συνγραφῆς τροφίδιτο(ς) ἀργυρίου χρυσο(ν) ια καὶ τὴν ἀποστασί(ν) καὶ
 προπρᾶσι(ν) κατὰ το(ῦ) ὑπάρχοντος (ἡμῶν) μέρος(ς) οἰκί(ας) κοινῆ(ς) καὶ ἀδιε-
 ρέτο(ν) ἐν Ταλι λεγομένου Μεγάλου Θουηρί(ν). ἔστι(ν) δὲ ἡ δεδ(ομένη) φερ(νῇ)
 ἀργυρίου (δραχμῶν) ξ καὶ παράφε(ρνα) ψελίων ἀργυροῦν ὀλκῆ(ς) ἀσ(ήμου) (δραχ-
² μῶν) δ, τοῦ δὲ Ὀννώφρι(ς) εἰσομοίρο(ν) | ὁμοίως ἐσχομέν(ου) καὶ τοῖς ἐσομένοις ἡμῶν
 ἐξ ἀλλή(λων) τέκν(οις) τοῦ προκίμενου (ἡμίσεος) μέρος(ς) οἰκί(ας). ἦν ποιεῖται Πατύν(ις)
 Πετεςούχ(ου) μη(τρὸς) Σουήρι(ς) ὡς (ἐτῶν) μς ο(ὕλῃ) μῆλ(ω) ἀριστ(ερῶ) Ταπνεβ-
 (τύνι) Ὡρου μη(τρὸς) Ταευτο(ς) ὡς (ἐτῶν) ν ο(ὕλῃ) πῆχ(ει) δε(ξιῶ). ὑπογράφ(εὺς)
 Πατύνι(ς) ὡς (ἐτῶν) ξ ο(ὕλῃ) τῦρ(ω) ἀριστ(ερῶ). τ(ὰ) ἄλλα ἀκολουθῶς.

1. τροφίδιτο for τροφιδῶ.

χρυσ(ν) for χρυσῶ(ν).

ψελίων for ψελιον.

The corresponding entry on the verso is in Col. III, l. 11 under the date Germanikeios 26. It reads:

συνγραφῇ (τροφίτις) Πατύνι(ς) πρὸς(ς) Ταπεσεν χρυσῶν ια.

Here the name of the second party to the contract affords some difficulty. It certainly is not Ταπνεβ-
 τύνις as it should be to agree with the recto, l. 2 above, but the writing is so careless that all the letters
 between the π and the final ν are very difficult to make out, and above the π there is a symbol, illegible
 for me, indicating the omission of one or more letters.

TRANSLATION.

An alimentary contract for money of the value of eleven pieces of gold and the contract
 of surrender and preliminary sale, concerning the half share belonging to me of a house
 held jointly and undivided in Tali in the so-called Great Thoeureum.

And the dowry given is sixty drachmas of silver, and as parapherna an armlet of silver
 of a weight of four drachmas of uncoined metal.

And Onnoupbris shares equally, holding in like fashion also with the children which we
 may have by one another, in the aforesaid half share of a house.

Which contract Patunis, son of Petesouchos, his mother being Soupris, about forty-five
 years old with a scar on his left cheek, made with Tapnebtunis, daughter of Horos, her
 mother being Taeus, about fifty years old, with a scar on her right forearm.

Signatory Patunis, about sixty years old with a scar on his left wrist.

The rest in conformity.

All of the above five abstracts obviously conform to a single type. They are unilateral
 agreements (ὁμολογίαι) which a husband, or in no. I his parents, make with his wife. It is
 true that in no. V the woman concerned is not specifically termed γυνή, but that may well
 be an error of omission, and the mention of the dowry and of children as possible heirs
 warrants the belief that she was such. An analysis of these agreements shows that they
 contain the following elements:

(1) A statement of the sum of money concerned in the Alimentary Contract. This is
 in silver money to the value of a certain number of gold pieces.

(2) A detailed description of certain pieces of real property affected in the arrange-
 ments.

(3) A general statement (omitted only in no. V) that all present and future possessions of the husband are affected.

(4) The value in silver drachmas of the wife's dowry.

(5) A list of her *parapherna* in detail. In no. IV in place of *parapherna*, or the personal possessions of the bride, we have mentioned *prosphorai*, or gifts. These, however, are of the same character as the *parapherna*.

(6) The names of the parties to the contracts with their ages and distinguishing marks, and those of any other signatories.

Contracts of this type find their interpretation through comparison with the Demotic Alimentary Contracts of Ptolemaic times. In making this comparison I avail myself of the analysis of the latter made by G. Möller¹.

The Demotic contracts were drawn up in two documents: the Alimentary Contract, called in Greek *συνγραφὴ τροφίτης*, and the *Geldschrift*, in Greek *πράσις*, which might be translated Contract of Sale but would more properly be termed a Receipt for Money. Both of these documents are executed by the man and addressed to the woman concerned.

In the Alimentary Contract the most important clauses are the following:

(1) The man's receipt to the woman for *x deben* in silver, her alimentation.

(2) His promise that his children by her will inherit all his present and future property.

(3) His gift to her of *x artabas* of wheat and *x deben* in silver as her annual revenue.

(4) The statement of her right of execution against him for all deficits.

(5) The giving of all his present and future property as surety for the revenue mentioned above.

The *Prasis* contains the following essential features:

(1) The man's receipt for the *x deben* of the alimentation assured by all his present and future possessions in movables and real property.

(2) His guarantee of the woman's ownership of this sum.

(3) His undertaking to protect her against all claims upon it.

(4) His admission of her right to prosecute him on the basis of the Alimentary Contract given her in regard to the *x deben* of silver.

To the examples of the Demotic contracts cited by Möller we may now add P. Mich. 624, a Demotic-Greek Alimentary Contract of the time of Augustus. Here the Demotic text conforms very closely to Möller's type of *συνγραφὴ τροφίτης*, but the *πράσις*, if it were drawn up at all, must have been a completely separate document. The alimentary sum is 21 pieces of silver, and the annual revenue promised to the woman is two pieces of silver with meat and drink². Practically the whole of the Greek text is lost, but this much of the first line can be read: [...]*ος Ἀρμηύσιος μητρὸς Ταμχιουσίους ὁμολογῶ... θισται τῇ γυναικί μου []θῶτησι Ὀρμύιος μ[η]τρὸς Ταπεμηούτος τ[ῇ]ν Αἰγυπτίαν συνγραφὴν τροφίτιδα ἀργυρίου*. Unfortunately what followed in the second line is missing.

We may in the next place compare the analysis of the contents of the abstracts from P. Mich. 622 given above with the clauses of the Demotic *συνγραφὰ τροφίτιδες* and *πράσις*.

¹ *Zwei ägyptische Eheverträge aus vorrömische Zeit*, *Abh. Berl. Akad.*, 1918, no. 3, 27-28 *Verträge über "lose" Ehen*.

² For a knowledge of the contents of the Demotic I am indebted to a translation by Sir Herbert Thompson.

(1) The amount of the alimentary sum is 21 χρυσά in nos. I and III; 11 in nos. II, IV and V. The Demotic contracts P. Cairo nos. 30607, 30608-9, 30616 and *Pap. demot. Bibl. Nat.* 224-5 give 21 *deben*. P. Mich. 624 has 11 "pieces of silver of the treasury of Ptah." The coincidence in the sums is striking and it seems that the χρυσά must correspond to the *deben* in some way. According to GRIFFITH (*P. Rylands*, III, 137) the *deben* or *teben* was equal to five silver staters or 20 drachmas. But the gold drachma was worth $12\frac{1}{2}$ times the silver coin (BOUCHÉ-LECLERCQ, *Histoire des Lagides*, III, 271 ff.), so that if we have here a reference to Ptolemaic gold staters of four drachmas the sums in question are of considerably greater value than 21 and 11 *deben* respectively. However, these sums were not actually transferred by the women into the keeping of their husbands, and the receipt was given for a fictitious payment¹. The object of this fiction was to fix the sum which the husband was obliged to pay to his wife in case of his divorcing her, and such sums were doubtless regarded as conventional penalties. Twenty-one and 11 *deben* were doubtless the penalties established by custom. At some time or other, and for reasons which do not appear, the χρυσά were in all probability inserted in contracts of this type as a substitute for the *deben*.

(2) The detailed list of real property mentioned in the abstracts does not seem to have a parallel in the Demotic documents. I would venture the suggestion that these properties were the objects of the Contracts of Cession, the *συνγραφαὶ ἀποστασίου* mentioned in the abstracts. Such a cession would be a legal fiction, like the deposit of the sums mentioned above, and would have for its object the offering of a special guarantee for the payment of such a sum. In no. I this contract takes the form of an agreement to bequeath certain properties to a son, who is the husband of the woman with whom the contract is made. These properties would then become sureties for the payment of the alimentary sum from the death of the husband's parents.

(3) The general liability of all present and future possessions mentioned in abstracts I, II, III and IV corresponds to the opening clause of the Demotic *πῶσις* where the man gives a receipt for the alimentary sum against each and all of his present and future possessions, movable and immovable. It is possible that this clause in the abstracts is taken from the contract termed the *πρόπρασις* which may then be regarded as taking the place of the Demotic *πῶσις*. The *συνγραφή ἀποστασίου* and the *πρόπρασις* together would then be regarded as two parts of a fictitious sale modelled on the regular Egyptian double contract for the sale of real property (cf. MEYER, *Juristische Papyri*, 77). Why the term *πρόπρασις* was preferred to the usual *πῶσις* is not clear. It may be owing to the fictitious nature of the transaction, which might only be made the basis of claims in the future. In the Demotic contracts of sale, the *πῶσις* regularly preceded the *συνγραφή ἀποστασίου*, and the reason is not apparent why the *συνγραφή ἀποστασίου* of the abstracts is mentioned before the *πρόπρασις*.

Sections (4), (5), and (6) of the abstracts find no parallels in Demotic documents of the type cited.

On the other hand, these abstracts lack two important features which are characteristic of the Demotic alimentary contracts. (a) There is no mention of the annual revenue to be given by the husband to his wife. (b) There is no direct statement that their children shall be the heirs of the husband's property. However, no. V provides that a certain

¹ See H. JUNKER, *Papyrus Louisdorfer I*, *Sitzb. Wiener Akad.* 1922, 192, no. 2.

Omnouphris shall share equally with the children in his property, and it may be that the lack of this and the former provision are due to the enforced abbreviation of the abstracts.

Finally, the abstracts make some contribution to the character of the Alimentary Contracts in general. The older view was that these corresponded to the Greek ἀγραφοὶ γάμοι and were marriage contracts establishing a loose form of marriage, *Verträge über "lose" Ehen* to cite Möller's term. More recently this view has been challenged by H. Junker in the study cited above. He has shown (pp. 34 ff.) that the so-called Demotic Marriage Contracts are in reality property settlements made between persons already united in marriage and having this marriage as a prerequisite. He also claims that the Alimentary Contracts do not indicate a looser form of marriage but are of the same character as the aforesaid property settlements. Only they are a later stage in the development of such contracts appearing in Ptolemaic times around Memphis and the Fayyûm (pp. 47 ff.). The change consists in the fact that whereas the older contracts contained a provision for the husband to pay his wife a penalty in case of his divorcing her, in the later ones he binds himself by the *πρᾶσις*, which guarantees the wife against all claims in amount of the fictive deposit, to give her this amount in the event of divorce.

Our abstracts, in my opinion, confirm Junker's theory. They are (with the exception of no. I) made between persons already united in marriage. The woman is called *γυνή* and has brought a regular dowry. Her children are presumably the heirs to her husband's property. There is nothing whatever to suggest a looser form of wedlock. The abstracts then may represent a further development in the native Egyptian property settlements accompanying marriage, one in which the *πρᾶσις* has been supplanted by the *συγγραφὴ ἀποστασίου* and *πρόπρσις*. They may be taken as typical of the practice current among the Egyptian and Greco-Egyptian population in the Fayyûm in the time of Claudius.

AN APPARENT INSTANCE OF PERSPECTIVAL DRAWING

BY N. DE GARIS DAVIES

Though the Egyptian artist did not draw in perspective, he may be said to have made some approaches to it. It is interesting to note how far these went and to what extent he was aware that there were laws of perspective, that is, that the apparent distortions of objects which changing points of view, or the different positions of objects in respect to the observer, entailed were not capricious, but regular, and therefore calculable. For, whether he chose to use the knowledge in his drawings or not, or employed it timidly and rarely, the perception of the fact would be a tribute to his powers of observation and his scientific impulse to bring observed phenomena under ordered rules.

Though it is obviously the same thing essentially to observe the slight distortions involved in the observation of an object from a point a little to one side, above, or below, there is a great practical difference in the acceptance and reproduction of the extreme alterations caused by an acute angle of vision, or great differences of distance and level. The Egyptian draughtsman, as we know, was wont to exclude all depth from his pictures, depicting everything as seen in its normal proportional breadth and height; as seen, that is, at right angles to its chief, or its accepted, plane. The one indisputable instance of deviation from this rule is the admirably drawn figure of a serving-girl shown in three-quarter aspect in the tomb of Rekhmirê at Thebes, though in the strictly classical period of Egyptian art. The novelty here is not that the artist ceases to look directly before him at the passing scene, but that he looks at an object the plane of which, at the moment of recorded vision, is set at an angle of some forty-five degrees to his line of sight, instead of at right angles to it. This is a less serious divagation from rule than would be that of allowing depth to his field. An instance of the latter kind would be of great interest, as showing more daring liberty of practice and imaginative range.

My purpose here is solely to call attention to a single picture which has been construed (naturally, but erroneously, as I think) in this way. On p. 206 of Prof. Schaefer's notable work *Von Aegyptischer Kunst* (edition of 1922), he briefly calls attention to the picture shown in Tylor's publication of the tomb of Sebeknekht at El Kab, Pl. 2, where the funeral barque, mounted on a wheeled trolly, is being dragged by oxen along what Schaefer interprets as a *Knüppeldamm*, or corduroy road, made of small logs laid down at intervals. These are seen in a straight line under the wagon itself, but presently deviate in an upward curve, implying that the path of the carriage was about to branch off, away from the spectator, that is, deeper into the field. If this, the natural explanation to a westerner, were admitted, we should have an Egyptian artist of a comparatively early date showing the retrocession of a scene, and that when there was no pressing need, indeed the very opposite.

I confess that I too, though with some misgiving, accepted Schaefer's admission of a presentation so unusual as to appear "as if plumped down into an Egyptian picture from

a world foreign to it." Neither of us ought to have made this blunder. For the "logs" are blue, and wood is always shown red or yellow. The other day, while enjoying the hospitality of that splendid veteran, Mr. Somers Clarke, at El Kab, I found myself before the original, and the true meaning of a very quaint representation at once leapt to the eye. The passage of the funeral barque is, as usual, being rendered easy, or its road kept pure, by libations of water and milk¹. The man whose duty it is to carry out the former rite is doing it thoroughly by turning a red jar upside down, so that the water issues from it, not in drops or in a zig-zag stream, but in blue streaks. The fact that they fall from a receptacle in motion is suggested by the backward slope of the falling jets before they touch the ground. The blue bars perhaps represent the moistened streak upon the dust rather than the falling spurts. The fancy may be far-fetched, but not much more so than the zig-zag or rippled course which in Egyptian drawings is nearly always given to water pouring down, or thrown up, from a jar. The draughtsman, I presume, wished to suggest that the libation of water was much more liberal than that of milk, which is generally shown falling in drops. With this explanation the picture becomes quite orthodox, though it exceeds the exceptional childishness which marks this unsophisticated period of Egyptian history.



A pertinent deduction may be drawn as to the comparative value of completely satisfactory and fairly satisfactory publications. That of Tylor, though forming a high tribute to his industry (for the tomb is exceptionally difficult to decipher), and to his conscientiousness, since he publishes it entirely in colour, has yet failed in the supreme test of affording to the student everything essential that the original provides. The way of editing is narrow, and few there be that find it. It must be confessed that a lacuna in the picture (not very carefully made good in the plate) has contributed to our discomfiture.

The pouring out of water and milk (?) before the funeral sled may be seen in the tomb of Tetaky at Thebes², and I quote this reference because of the close resemblance of the two monuments in style and ceiling decoration. One would say that the two were very near in date, and this similarity may be used in support of the compression of the period between the Twelfth and the Eighteenth Dynasties, or the placing of the Sebekhotps somewhat late in the period.

¹ In the original a milk-jar, so faint that it may be an abandoned detail, can be detected in the hand of the man with the censer, and the position of the hand makes this addition suitable.

² *Journal*, XI, 17. It will be noticed that the action of the left hand of the leader of the procession in Pl. V there is uncertain, and I note an unexplained streak across his body. It may be, therefore, that the same representation of water by streaks was observed in that tomb also, whether in the final, or only in a provisional, draft. On the other hand, the liquid cast directly under the sled seems to be falling in a continuous stream.

The discs on which the carriage of the barque moves must be wheels, despite the omission of the axle and spokes by the artist, or of the axle only, if the wheel were a solid one. For we have the wheeled carriage of the barque of King Kamôsé and the later (?) representation of another¹. It is surprising that the use of wheeled transport should be limited to funerary use; for, if it were an innovation taken over from the Hyksos, its use in ceremonial was least to be expected. It may be that wheels were considered to afford an escape from close contact with the ground or with human carriers, and that this was deemed to be in the interests of ritual purity. But the foreign custom, if such it was, seems to have been cast out with the foreigners.

¹ MASPERO, *Struggle of the Nations*, 81; WILKINSON, *Popular Account*, I, 384.

A ZENON PAPYRUS AT CORPUS CHRISTI COLLEGE, CAMBRIDGE

By A. S. HUNT

A papyrus from the archives of Zenon has already appeared in this *Journal* (Vol. IX, pp. 81 sqq.); an opportunity of producing another has been kindly given me by Sir Edwyn Hoskyns, librarian of Corpus Christi College, Cambridge, to which foundation the original now belongs. It is an outstanding item in a small Greek and Coptic collection (MS. 541) acquired in Egypt by Sir Edwyn Hoskyns in 1915; the rest of the Greek pieces exemplify for the most part familiar types of the Roman period, though I may note among them a certificate of a "sealer of sacred calves" (*ιερομοσχοσφραγιστής*), similar, *e.g.*, to P. Gen. 32 and probably issued by the same person, and the beginning of a first-century document addressed to Alcibiades also called [Sa]rapiion, an otherwise unrecorded strategus of the division of Heraclides. The historical importance of the large and still increasing body of texts associated with Zenon makes desirable the speedy publication even of minor pieces, which may serve to illustrate or to supplement others preserved elsewhere. That more exists of the present papyrus, the source of which is evident and might have been inferred with security even in the absence of Zenon's name, is probable enough.

The fragment, which measures 17.9 × 13.6 cm., is the upper part of the core of a roll, being complete at the top and to the right, but broken at the foot and along the left side. It is rather thin in texture, and about half-way down a narrow decayed belt runs across it, where perhaps the roll was bent or folded over. Three columns are represented, of which the first is mostly broken away, the second lacks the lower portion, and the third, a short final column, alone is intact. They formed part of a list of arrears of taxes, the sums due from various individuals being classified under (*a*) the particular tax, (*b*) the year for which they were due, and (*c*) the place at which the debtors resided; among them, be it noted, appears Zenon himself, who is debited with the considerable sum of 169 drachmae 4 obols. There were two years concerned, one the 16th, the other, since a note at the end respecting collection of the arrears is dated in the month Choiak of the 18th year, being no doubt the intervening 17th. These years most probably refer to the reign of the third, not the second, Ptolemy. P.S.I. 552, dated in the 17th year, was assigned by Vitelli to the reign of Philadelphus on the ground that the eighth year of Euergetes was the latest date attested for the Zenon papyri. Mr. Bell, however, kindly informs me that that argument no longer holds good, since recent acquisitions include a document of the 10th and another of the 13th year, the latter being a letter addressed to Achoapis, no doubt the writer of the note at the end of Col. iii below. On the existing evidence it is easier to extend Zenon's career to 229 B.C. than to credit him with a large property in the Fayyûm so early as 270-69 B.C. The paucity of documents from this later period of his life nevertheless remains a curious fact which awaits explanation. The two imposts named are the *ἐκτὴ παραδείσαν* (probably),

or tax of $\frac{1}{2}$ levied on the produce of gardens, which with the similar tax on vineyards was otherwise known as ἀπόμοιρα, and the rarer τρίτη περιστερώνων, or tax of $\frac{1}{3}$ on pigeon-houses.

I proceed to give the text of the papyrus, which is written in a practised hand, well-formed for the most part though tending here and there to become more cursive, notably in the short letter already referred to which was appended to the list and is a mere scribble; the hand of this is not, however, to be distinguished from that of the rest of the fragment. A translation and a few brief notes on minor points follow the transcription.

Col. i.	Col. ii.
? Ὀνιτ]ῶν Κοίτη·	περιστερώνων γ'·
...]στρατος ια.	Φιλαδελφείας·
....]ας·	Ἄνδρων ζ.
....]χος β (τριώβ.).	Νικόλαος (ἐκατοντάρουρος) ε.
5].	Ἡρακλείας·
]·	Δημήτριος σ.
καὶ τοῦ] ις (ἔτους),	Καρανίδος·
ς' παραδ]είσων·	Θεόδοτος κ,
]	Νικόμαχος ιη,
10]	Ἡφαιστί[ω]ν ιε.
]	/σα.
]	καὶ τοῦ] ις (ἔτους),
]	Φιλαδελφείας·
]	Ἀντήνωρ (ἐκατοντάρουρος) ιβ,
15]	Ἐτέαρχος ι.
]	Ἀρσινόης· Μενέσθευς ιγ (δυόβ.),
]κ	Ἡγήμων (ὀβολός) (ἡμιωβ.).
]	Ἡρακλείας, ις (ἔτους)·
]α (τετρώβ.)	Δημήτριος η.
20]	[Ἱερᾶ]ς Νήσου·

Col. iii.

ἐν ἡμῖν·	ς χαίρειν. κα(τα)λογίζου?)
Ζήνων του ις (ἔτους)	πράξας τοὺς προ-
ρξθ (τετρώβ.).	γεγραμμένους
	τὸ ἐν αὐτοῖς ὀφίλημα.
Ἀχλοῦπις Πτολεμαῖοι	(ἔτους) ιη Χοῖαχ κη.

Cols. ii.-iii. "The 3rd on pigeon-houses: At Philadelphia, Andron 7 drachmae, Nicolaus, holder of 100 arurae, 5 dr. At Heraclia, Demetrius 6 dr. At Karanis, Theodotus 20 dr., Nicomachus 18 dr., Hephæstion 15 dr. Total 71. And for the 16th year: at Philadelphia, Antenor, holder of 100 arurae, 12 dr., Etearchus 10 dr. At Arsinoë, Menestheus 13 dr. 2 obols, Hegemon 1½ ob. At Heraclia, for the 16th year, Demetrius 8 dr. At Hieria Nesua...In our province, Zeno, for the 16th year, 169 dr. 4 ob."

"Achoapis to Ptolemaeus, greeting. Make account, after collecting from the persons aforesaid the sums owing from them. 18th year, Choiak 28."

- i. 1. 'Οννιτ]ῶν is somewhat speculative, since that part of the name seems to be unattested before the Roman period, Κοῖται simply being the usual Ptolemaic appellation (P. Petrie iii 117 (*k*), P.S.I. 395. 4).
3.]ας (or]ως) is no doubt the termination of another village-name; Τάρε]ως would be suitable in this context.
- 5-6. A total perhaps occurred here; *cf.* ii. 11-12.
- ii. 1. This tax is mentioned also in P. Petrie iii 119 recto, Tebt. 84. 9, 571, Wilcken *Ost.* ii, 1228, B.G.U. 1377.
9. The first half of the name is very doubtfully read.
15. Etearchus occurs repeatedly in the Zenon papyri.
- iii. 1. ἐν ἡμῖν = in our department, dues for which we are responsible. For this idiomatic use of ἐν, which recurs in l. 8 below, *cf.* P. Tebt. 5. 227, note.
- 4-5. Besides being very cursively written the first words of these two lines are smudged, but the reading is not really in doubt. κα(τα)λο(γίζου) seems preferable to κα(τὰ) λό(γον), which would leave the sentence without a main verb.

A PAPYRUS DEALING WITH LITURGIES

By HENRY B. VAN HOESEN AND ALLAN CHESTER JOHNSON

With Plate XX.

This papyrus (numbered AM 8938 in the Princeton University collection) is of unknown origin. The fragment measures 7.6×8.3 cm. and contains ten lines, Pl. XX. On the right the original margin is preserved. Four letters supplied at the beginning of line 8 seem to connect it with line 7 and to indicate the original length of the line as about 38 letters. The document lacks both beginning and end, but from the content of the extant portion it seems to have been an edict or an official letter dealing with the assignment of liturgies. The chief importance of the document lies in the fact that it contains a clear reference to the *album decurionum* in Egyptian towns. Hitherto direct evidence for the *album* has been found only in Latin inscriptions of the Western Empire and in the Digest of Justinian. In Egypt and in the eastern provinces no reference to the *album* is known from municipal records¹, although it is apparent that such lists must have been prepared for official purposes and the lack of preservation or reference is purely accidental. Furthermore the document is significant for the classification of public duties as *βουλευτικαὶ λειτουργίαι* and *δημοτικαὶ ὑπηρεσίαι*.

While the fragment is undated, the character of the script seems to place it early in the third century, and the reference to municipal senators shows that it does not antedate the introduction of the municipal organization by Septimius Severus in A.D. 202. It may, in fact, be a copy of the regulations devised for the assignment of the liturgies in the period of transition from the old to the new system.

When the municipal system was introduced into Egypt the senators would presumably be drawn from all living ex-magistrates (cf. *Dig.* 50. 3. 1). Their number, however, would not be sufficient to bring the list of senators to a hundred, which was the normal membership in the cities of the western provinces. In some cases a smaller number may be found. At Thamugadi the *album* contained the names of twelve patrons and fifty-nine senators (DESSAU, *Ins. Lat. Sel.* 6122). The charter of Tymandus provided for a senate of fifty, but the hope was expressed that the membership would be increased (BRUNS, *Fontes iuris Romani*, 34). As a general rule the imperial government preferred to have a strong senate in the municipalities, since this body was responsible for the collection of the imperial taxes, and the larger the senate the more secure was the treasury. It is probable, therefore, that when the municipal senates were constituted in Egypt, the names of living ex-magistrates were supplemented by a list of wealthy and influential citizens in each metropolis, and from this supplementary list the quota of the senate was filled by the official in charge of its inauguration.

Unfortunately both the restoration and interpretation of the new document are problematical. Traces of words ending in *-κην*, or *-τα*, or *-ενοι* at the beginnings of the lines obviously offer a wide range of conjecture in restoration. The following is offered as a

¹ Cf. PROCOPIUS, *Anecdota*, 29. 17, 19, 21 for a reference to the *album decurionum* at Ascalon.

tentative solution. The document seems to deal with the liability to liturgies of men of senatorial fortune whose names have not yet been included in the *album*. If we are correct in assuming that the document dates about A.D. 202, the period of transition between the old and the new system must have given rise to considerable confusion in the assignment of various public liturgies and magistracies. Apparently certain names had been proposed for the senate and the list had been forwarded to the official (the epistrategus?) responsible for the selection of candidates, but the final choice of names for the *album* seems for some reason to have been delayed. Some of the citizens, whose names were presumably on this tentative list, had been appointed to liturgies of a humbler character (*δημοτικαὶ ὑπηρεσίαι*), and had apparently pleaded that citizens of senatorial wealth and rank were excused from such tasks. These men not only claimed immunity from the demotic *munera* on the ground that their rank excused them, but they also tried, apparently, to avoid senatorial liturgies for the reason that their names were not yet on the *album*. The latter plea is in accord with the principle laid down by Paulus (*Dig.* 50. 2. 7. 2): *Is, qui non sit decurio, dumvratu vel aliis honoribus fungi non potest, quia decurionum honoribus plebeii fungi prohibentur*.

In addition to the reference to the *album decurionum* this document also describes two classes of public service as *βουλευτικαὶ λειτουργίαι* and *δημοτικαὶ ὑπηρεσίαι*. In the Greek provinces of the Roman Empire and in Egypt public duties are recorded as *χρεῖαι*, *ἐπιμέλειαι*, *ἐργασίαι* (*ἀπεργασίαι*), *ὑπηρεσίαι*, or *λειτουργίαι*. The last is the term usually applied to public *munera*, and it was even used with reference to magistracies (*honores*, *ἀρχαί*) especially in later times when the latter became extremely burdensome and citizens sought to avoid them (PREISIGKE, *Beamtenwesen*, 14, but cf. OERTEL, *Die Liturgie*, 6 f.). Possibly when the municipal organization was introduced into Egypt, official documents distinguished between *λειτουργίαι* and *ὑπηρεσίαι*, but ultimately the former was accepted by general usage to describe both forms of service. It is probable therefore that the term *δημοτικὴ ὑπηρεσία* found in this document is equivalent to *δημοτικὴ λειτουργία* which we find in papyri of the Byzantine age.

Liturgies appear to have been classified and assigned according to four different principles, (1) the nature of the service, (2) the place of performance, (3) the wealth of the incumbent, and (4) his social status in the community.

In the Code and Digest of Justinian liturgies are classified as *munera personalia* (which included the *munera sordida*) and *munera patrimoniorum* (*Dig.* 50. 4. 18). The former were those which required a certain amount of personal supervision (or labour) but did not involve the incumbent in any pecuniary outlay. The latter included all those duties which required the holder to contribute from his personal fortune either by direct expenditure of money or by furnishing supplies such as the provision of transport for the public post or by billeting soldiers or officials in his household. The *munera patrimoniorum* were necessarily limited to owners of property, but the *munera personalia* could be assigned to all classes in the community.

In the edict of Tiberius Julius Alexander dated A.D. 68 (DITTENBERGER, *O.G.I.S.* 669) it is provided that citizens of Alexandria should be exempt from *χωρικά λειτουργία*. These liturgies probably refer to various public duties in the administration of the nomes and villages. Jouguet contrasts these with the *πολιτικά λειτουργία* (cf. *P. Fior.* 382¹

¹ WILCKEN (*Grundzüge*, 344) observes that the *πολιτικά λειτουργία* mentioned in this papyrus seem to be contrasted with the *munera patrimoniorum*. Cf. also *P.S.I.* 771.

dated A.D. 216) which were liturgies peculiar to the municipal organization of the Greek cities and of the capitals of the nomes after 202 (JOUQUET, *La vie municipale dans l'Égypte romaine*, 98). This classification of liturgies is due to the peculiar organization of Egypt as a part of the Roman Empire and is not found elsewhere.

In Egyptian records citizens are frequently classified according to their wealth as *εὐποροὶ* and *ἄποροι* with reference to their ability to perform certain liturgies (WILCKEN, *Gr. Ostraka*, 1, 506 ff.; *Grundsätze*, 342 ff.; OERTEL, *Die Liturgie*, s.v. πόρος; cf. *P. Giss.* 59). The requisite income for a certain liturgy might vary in different periods and in different towns. From *P. Oxy.* 1405 we learn that a form of the Athenian *antidosis* was adopted in Egypt whereby those named for liturgies whose duties were beyond their income might offer to surrender their property to their nominator in lieu of performing the liturgy (cf. the commentary of Grenfell and Hunt *ad loc.*).

Finally the new document is of importance in classifying public service according to the social status of the incumbent. A parallel for this practice is found in the Digest of Justinian (50. 4. 3, 15): Praeses provinciae provideat munera et honores in civitatibus aequaliter per vices secundum aetates et dignitates, ut gradus munerum honorumque qui antiquitus statuti sunt, iniungi, ne sine discrimine et frequenter isdem oppressis simul viris et viribus res publicae destituantur. Likewise in *Cod. J.* 10. 48. 1 and 2 it is stated that men who have attained certain official rank should be excused from humbler liturgies. This fragment of papyrus shows that in Egypt a line was drawn between senators and non-senators in the assignment of liturgies. A similar distinction is found in Xanthus, a Lycian city, where there is a reference to *βουλευτικαὶ* and *δημοτικαὶ ἀρχαί* (CAGNAT, *I.G.R.R.* 3, 623). Since the line between magistracies and liturgies in the Greek cities is difficult to determine, it is quite possible that the term *ἀρχαί* is used for *λειτουργία* in the Lycian inscription and that the distinction of liturgies as senatorial and non-senatorial is universal. The *δημοτικαὶ λειτουργίαι* are recorded in *P.S.I.* 86, 11 (A.D. 367-375) and in *P. Lips.* 65, 12 (A.D. 390). In *P. Oxy.* 1101, 24 (A.D. 367) a distinction is drawn between a citizen of humbler means (*δημοτικῆς τύχης*) and a senator (*βουλευτῆς*). A reference to *δημοτική* and *βουλευτική λειτουργία* may be found (restored) in *P.S.I.* 771 (A.D. 322): *παρέξομαι σο[ι] βεβαίαν διὰ παντὸς ἀπὸ πάντων πάσῃ βεβαιώσει καὶ καθαρὰν ἀπὸ πάσης δημοτικῆς καὶ πολειτικῆς καὶ βουλευτικῆς λειτουργίας κτλ.* Here the reference is to an estate which is transferred with immunity from all civic and curial obligations. The expression *βουλευτικὸν φρόντισμα* and another restoration of *βουλευτική λειτουργία* are found in *P.S.I.* 684, a citation of an edict, which, it may be noted in passing, also illustrates the assignment of senatorial liturgies by the local senate in the fourth or fifth century (...προσάττει μηδένα βουλευτικὸν φρόντισμα ὑπεισελ[θεῖν] ἀνευ ὀν[ο]μασίας τῆς βουλῆς...). Other evidence for the rank of the incumbents of the various Egyptian liturgies may be found in OERTEL, *Die Liturgie* (see the sub-section *Soziale Qualifikation* under each office, pp. 320 ff.). It is probable that there were certain humbler duties (*munera sordida*, *σωματικαὶ λειτουργίαι*, not necessarily limited to the "Fronarbeiten" which were performed by the native Egyptians) to which law or custom prescribed that citizens of senatorial rank or wealth should not be assigned.



1



2

Papyrus AM 8,938 in the collection of Princeton University.

1. Photostat. 2. Photograph.

TEXT.

]πρ.ρ.....
 [.....βουλευτι]κὴν ἀξίαν εἰ μὴ πρότερον
 [ἐντεταγμένοι ἐν τῷ] βουλ[ε]υτικῷ λευκώματι
 [καὶ τὰ ἐπιτάγματα]τα(?) περιγράφειν τῶν λειτουργ-
 [γίων παρανόμως(?) ἐ]πιχειροῦσιν τῷ πειρᾶσθαι 5
 [ἀποκρούεσθαι(?) τὰς δ]ημοτικὰς ὑπηρεσίας διὰ τὸ
 [ἔχειν πόρ[ους βου]λευτικούς, τὰς δὲ βουλευτι-
 [κὰς λ]ειτουργίας ἀποκρούεσθαι τῷ μὴ ἐντετά-
 [χθαι ἐν τῷ] τ[ῷ]ν βουλευτῶν λευκώματι. φρόν-
 [τισον ὅπως οἱ τελοῦ]μενοι τὰς ἀπεργασίας κατὰ τὸν 10
 [νόμον...]

TRANSLATION.

.....those possessing senatorial rating(?) if not already enrolled in the senatorial album, and are illegally(?) trying to avoid the imposition of liturgies by attempting to evade(?) plebeian service because they possess senatorial means, and to evade the senatorial liturgies on the ground that they have not been enrolled in the album of senators. See to it that those performing their duties according to law.....

NOTES.

1. 2. ἀξίαν (=rank, fortune): cf. *P. Fay.* 125, 11 (μείζονος ἀξίας γερῆσθαι), PREISIGKE, *Wörterbuch der griechischen Papyrusurkunden*, s.v. Cf. βουλευτικὴ τύχη, *P. Lond.* 1015, 1.

3. βουλευτικῷ λευκώματι: the album iudicum is recorded in *B.G.U.* 288, 4, and the use of the album for laws and edicts is found in a Ptolemaic document (*P. Hib.* 29, 9). Cf. PAULY-WISSOWA, *R.E.*, s.v. album.

4. ἐπιτάγματα: this restoration gives an awkward word-order, but it seems to suit the general sense of the document. (Cf. PREISIGKE, *op. cit.* s.v.) περιγράφειν (=circumscribe, avoid): cf. *P. Oxy.* 1876, 5 (διὰ τῆς φυγῆς π. τὸ χρέος...), *P. Grenf.* II, 82 (εἰ γε βούλεσθε ἔχθραν μεγάλην περιγράψαι), *P.S.I.* 92, 16. The noun περιγραφὴ is used in a similar sense, especially in the Byzantine period (cf. *P.S.I.* 452, 13).

5. τῷ πειρᾶσθαι is an awkward repetition of ἐπιχειροῦσιν, but the reading is certain.

6. δημοτικὰς ὑπηρεσίας: see Introduction.

8. ἀποκρούεσθαι (evade), though not found elsewhere in papyri in this sense, is intelligible.

10. ἀπεργασίας is here synonymous with ὑπηρεσίας, cf. PREISIGKE, *op. cit.* s.v.

11. The document probably provided for the immunity of those who had complied with the law in performing their assigned duties. Cf. *P. Oxy.* 62: τοὺς ὑπηρετούντας...ἀλειτουργήσουσι εἰναί....

NOTES AND NEWS

To judge from what news has up to the present come to hand from Abydos, our expedition there is having a most successful season. The party now consists of Messrs. Frankfort, Felton and Baly, for Dr. Hall, who very kindly undertook to spend some weeks there at the beginning of the season in order that the party might have the benefit of his knowledge and experience of the site and the methods of the Society, is already back in England.

In the cemeteries some interesting tombs of the Twelfth Dynasty have been dug, and among the best finds are a large stele of the reign of Sesostriis III with a long religious or funerary text, and a fine painted limestone statuette of the same date, together with other valuable stelae. Another group of tombs to the south of these last proves to belong to the Earlier Intermediate Period, Seventh to Tenth Dynasties, and has yielded button-seals, beads and amulets of the type generally associated with this period.

The main work of the season, namely the clearing up of the problems connected with the Osireion, has only just begun. Preliminary trenches and investigations have however established one important fact, namely that the whole building was planned and begun by Seti I, probably as his cenotaph. This is shown by the fact that granite clamps used for binding the limestone blocks in the interior of the main walls of the Great Hall are inscribed with his cartouche. This is in itself a discovery of considerable importance. The massiveness of the structure which by some has been taken to indicate a Middle Kingdom or even Old Kingdom date is, as others of us have believed from the first, simply explained by the fact that it had to support the weight of about thirty feet of superincumbent sand.

Mr. Felton is already at work in the temple of Seti making the complete photographic record of the building which is one of the principal aims of our work on the site.

The installation of pumping machinery needed to drain the water from the rectangular "canal" in the Great Hall is now complete. Many of the huge blocks which still encumbered this portion of the building have been removed and all is ready for the clearance of the "canal" which will, we hope, produce decisive evidence as to the nature of the building. Since, however, the Great Hall is now known to be Seti's work, and since further the innermost chamber, discovered in 1913-14, is inscribed with texts of a funerary nature in the name of the same king (*Journal*, I, 164), there can hardly be much doubt that the building is a cenotaph begun by Seti I and finished by Merenptah, whose inscriptions cover the walls of the sloping passage laid bare in 1911.

It seems at present highly probable that we shall be able to hold our usual annual exhibition of objects found in the excavations. Time and place are not yet fixed, but the month will probably be July and we hope once again to be allowed the use of the rooms of the Society of Antiquaries.

The usual series of Winter Lectures has been given this year at Burlington House. The following is the complete list:

October 13th, 1925. Egyptian Literature, by A. M. Blackman, D.Litt.

November 17th, 1925. Applied Science in Ancient Egypt, by Colonel H. G. Lyons, F.R.S. (Postponed from last session.)

January 26th, 1926. Alexandria and Constantinople: The Struggle between Emperor and Patriarch, by Norman H. Baynes.

February 16th, 1926. Early Arabian Tribes, by Sidney Smith, M.A.

March 16th, 1926. Scarabs, by H. R. Hall, D.Litt.

Colonel Lyons introduced a novelty into his lecture by showing specimens of Egyptian water-clocks and time measurers. We hope to print Mr. Baynes' lecture *in extenso* in our next number.

Plate XI in Volume XI of this *Journal*, a map accompanying Mr. Murray's article on Roman Roads and Stations in the Eastern Desert, was intended to be a folder but was unfortunately printed on an unfolded sheet. Its edges thus come uncomfortably close to the margins of the page, and the unsightliness of this will be intensified by the trimming of the binder. We therefore advise readers to instruct their binders to mount this plate on a rather deep guard and to fold it.

The fourth volume of the Theban Tombs Series will be ready in a few weeks' time, and is of special interest in view of the recent discoveries at Luxor. The subject is the well-known tomb of Huy, the viceroy of Nubia in the reign of Tutankhamūn. Many of the scenes are published for the first time, and Mrs. Davies's copies display a degree of accuracy not found in the previous publications. There will be five magnificent plates in coloured collotype, and thirty-five more plates in line and collotype. The explanatory text, which will discuss the personality and career of Huy, and considerably amplifies our knowledge of conditions under Tutankhamūn, is by Dr. Alan Gardiner. The book will cost fifty shillings to the general public, but is offered to members of the Egypt Exploration Society for thirty-three shillings. A special offer is now also made to members for the four memoirs of the series hitherto published; these can now be obtained for the inclusive price of five guineas. Orders should be sent to the Secretary of the Society, at 13 Tavistock Square, W.C.1.

The Society's library at 13 Tavistock Square is being increasingly used, and becoming more fully appreciated. We have to thank various donors of books for their help in this particular branch of our activities. There are, however, still many regrettable gaps in our collection, while at the same time we have some volumes in duplicate. Perhaps members who have Egyptological books for which they have no further use would be willing to present these to the library for the benefit of other members. Those who possess duplicates might be glad to effect an exchange. Our secretary is always pleased to hear from such members, and will send the rules for borrowing books and the list of available duplicates on request.

The offer by Mr. Rockefeller of £2,000,000 to the Egyptian Government for the endowment of a museum adequate to exhibit the antiquities of the country is an event as important as it is amazing in the history of archaeology. We do not yet know exactly

what is envisaged by the donor, but it is quite clear that the gift will act as an immense stimulus to Egyptological research. Its first effect will doubtless be to relieve the congestion existing in the Cairo Museum. There is already a serious lack of space—the finds from the tomb of Tutankhamûn alone will require many rooms for their proper storing and exhibition—and the shortage is perpetually accentuated by the fact that structural troubles constantly necessitate some portion of the building being under repair and so out of commission. The main moral of the gift, however, is the immense educational value which is clearly attached by a far-sighted American to Egyptian antiquities, not only for Egypt herself but for the world in general.

The first two fascicules of the *Revue de l'Égypte ancienne*, the organ of the new Société française d'égyptologie, have lately appeared. They contain 132 pages of text and 5 plates, of which the first is a fine coloured half-tone of the beautiful Eighteenth Dynasty royal head in glass paste in the Louvre. Each volume is to consist of four fascicules, and the price of subscription is 150 francs for France and 175 for foreign countries in the Postal Union.

NOTICES OF RECENT PUBLICATIONS

The Rhind Mathematical Papyrus: Introduction, Transcription, Translation and Commentary. By T. ERIC PEET. Liverpool, the University Press, and London, Hodder and Stoughton, 1923. Price 63/-.

The technical writings ("scientific" is hardly the term) which have come down to us from Ancient Egypt deal mostly with the two subjects medicine and mathematics; and the most representative document of the latter class is the Rhind Mathematical Papyrus. It is in an excellent state of preservation, is about 17 feet long, and contains, in addition to a long series of tables, nearly 80 problems and exercises covering a large part of the arithmetical knowledge and practice of the Middle Kingdom. It is thus of very great importance not only in Egyptian studies but for the general history of early mathematics. Nearly the whole of it was purchased at Thebes in 1858 by A. Henry Rhind, an English traveller and writer on Egypt, and after his death was acquired by the British Museum; some fragments, apparently broken off by natives when dividing the roll into pieces, were bought by another traveller, Edwin Smith, and, with other objects from his collection, passed in 1907 into the possession of the Historical Society of New York. Shortly after their acquisition of the main papyrus the Trustees of the British Museum had lithographic plates prepared for a facsimile reproduction; in the publication, however, they were anticipated by August Eisenlohr, who in 1877 brought out facsimile plates accompanying a treatise, *Ein Mathematisches Handbuch der alten Aegypter*, which until now has remained the only comprehensive treatment of the document. Not until 1898 did the British Museum facsimile appear, by no means an improvement on its predecessor¹. Eisenlohr's book, now nearly 50 years old, is both antiquated and unsatisfactory in treatment: not only does it contain a quantity of wrong readings, translations and interpretations, and omit the fragments in America, but also the explanations of the exercises are often complicated and abstruse to a degree which is wholly unnecessary in dealing with a mathematical system so simple in its principles as the Egyptian one. For many years a new edition of the papyrus has been badly needed; this want is now ably supplied by Professor Peet's work.

The volume opens with useful sections dealing with previous work on the papyrus, the date of the latter, and its contents. These are followed by others of a more general nature, which make the book an excellent survey of Egyptian mathematics as a whole, rather than merely the edition of a single document. That on the general character of Egyptian mathematics is the most important; it takes us into that strange world in which there is (on paper, at least) no such thing as $\frac{1}{2}$, for which² the only equivalent symbol is $\frac{1}{2} \frac{1}{2} \frac{1}{2}$; in which it is possible to multiply directly only by 2, 10, $\frac{2}{3}$, and $\frac{1}{2}$; where multiplication and division are performed by exactly the same operation; and where, in spite of these limitations, complex calculations are performed often with surprising ease and accuracy. With regard to the fractional quantities, Peet makes out a good case for the *conception* among the Egyptians (often denied by modern writers) of fractions other than $\frac{1}{n}$ in which the numerator is more than 1, although the *notation* did not admit the expression of these in writing; and he maintains that the method employed to add fractions in special cases was identical in principle with our use of a common denominator. The section "Method of setting out the sums" contains a useful treatment of the technical terms and phrases used in the formulation, solution and proof of the problems. In the "Comparison of Egyptian mathematics with Babylonian" the interesting fact is pointed out that the Sumerians possessed a system of notation by position analogous to our own, a great advance over the Egyptian notation. The last of these introductory sections gives a useful account of what little the Greeks have to say on Egyptian mathematics.

The translation and commentary, in which the rendering of each section is accompanied by a discussion of its nature, the arithmetical methods employed, special words, scribal errors, and so on, are put in such a

¹ While Eisenlohr's plates respect the divisions of the text, one might think that a blind man had been entrusted with the division of the British Museum plates. The latter publication was faithfully dealt with by GARRIN in *Orientalistische Literaturzeitung*, II, 116-7.

² Such a symbol would doubtless seem to the Egyptians to be a mere evasion!

way as to be as clear as possible not only to non-mathematical readers like the present reviewer, but also to those who know no Egyptian. In the course of this part, however, the author brings out many interesting philological points, of which the most important, resulting from a new reading, is the taking the word for "how much?" (*wr*), previously unknown before Late Egyptian, back to the Middle Kingdom. At the end are 24 plates containing the complete hieroglyphic transcription of the original hieratic, with notes in which, among other things, the errors of the British Museum facsimile are pointed out; also a plate giving in facsimile the New York fragments, which bridges the gulf previously existing between the two portions of the papyrus.

The author is to be congratulated on a very able piece of work; it may be added that the volume is a handsome small folio, of unusually tasteful appearance inside and out, and does credit to its printers and publishers.

The rest of this review is concerned with a number of points in the volume which invite criticism or remark of a more or less technical character.

Page 4. "Table of resolution of fractions with numerator 2" is not a very happy description of Pla. A-D. These tables are concerned with the division of 2 by odd numbers—a somewhat different thing.

P. 5. Nos. 56-9 do not all deal with "batter of pyramid"; 57 and 59 deal with its height.

Pp. 6-7. Eisenlohr speaks (*op. cit.*, 1) of a "leather roll of mathematical content" in the British Museum. It would be good to know definitely whether this document exists or not.

P. 7. I venture to include here, as not irrelevant to the matter in hand, two remarks on the Cairo writing tablets as discussed by Peet in "Arithmetic in the Middle Kingdom," *Journal*, ix, 91 foll. :—(a) the workings-out of the fractions $\frac{2}{3}$ and $\frac{1}{4}$ of the gallon on these tablets contain, as by-products, also the fractions $\frac{3}{4}$, $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{5}$, while $\frac{1}{4}$ can be obtained by halving $\frac{1}{2}$; since $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{5}$ require no working-out, the possessor of these calculations has at his disposal all the fractions from $\frac{3}{4}$ to $\frac{1}{10}$, except $\frac{1}{6}$ and $\frac{1}{8}$; and these were possibly obtained as $\frac{3}{4}$ of $\frac{1}{2}$ and $\frac{1}{10}$ respectively. Thus the series of fractions chosen for calculation, namely, $\frac{3}{4}$, $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, is perhaps not merely fortuitous. (b)¹ *Ibid.*, 93, footnote 2, and 94; the correct amount, $\frac{2}{3} + \frac{1}{4}$, is given in three out of the four reckonings of $\frac{1}{2}$ gallon; in the fourth the fractions are illegible.

P. 10. The Egyptians' mathematics was certainly extremely practical, materialistic like themselves, but I cannot agree that "everything is expressed in concrete terms," in view of the terms *ḥḥ*, "quantity," *ḥḥyt*, "superficies," written with $\begin{smallmatrix} \text{---} \\ | & | & | \end{smallmatrix}$ (*cf.* remarks to p. 61).

P. 12. *Hḥi ḥnt*, literally "to break-off from among," the expression for "to subtract from" (nos. 43, 50, 54, 55, 64), hints at an idea of subtraction different from our own. I take it that if we form a mental image of say the subtraction of 3 from 9, we imagine the removal of the last three units composing nine (*ḥḥ* *ḥḥ* *ḥḥ*), the first six (*ḥḥ* *ḥḥ* *ḥḥ* *ḥḥ* *ḥḥ* *ḥḥ*) being left intact. But the Egyptian phrase seems to indicate that any three units "from among" 9 could be taken away.

The writing $\begin{smallmatrix} \bigcirc \\ \times \end{smallmatrix}$ for *ḥḥi* in nos. 43, 50 is noteworthy.

P. 13. It is perhaps overstating it to say that division was accomplished by reversing the process of multiplication. In multiplying 7 by 5 and in dividing 35 by 7, the working on paper is the same, namely

$$\begin{array}{r} \backslash 1 \quad 7 \\ 2 \quad 14 \\ \backslash 4 \quad 28 \end{array}$$

In the multiplication the result is obtained by adding the products of those multipliers which make up 5, in the division it is obtained by adding the multipliers of those products which make up 35.

Pp. 13-14. *Wḥ tp* may mean "add cases (or instances)"; e.g., *wḥ tp m 4 (r) apw 3* = "add instances with 4 to 3 times" = $4 + 4 + 4 = 12$. In a calculation

$$\begin{array}{r} 1 \quad 4 \\ 2 \quad 8 \\ 4 \quad 16 \end{array}$$

to one "case" of 4 is added 2 "cases" of it, then 4 "cases" of it; and by a slight extension *wḥ tp* can be used of adding $\frac{2}{3}$ or $\frac{1}{2}$ of a "case."

P. 14. *Nḥ A ḥnt B*. P.'s explanations of this interesting phrase are not very satisfactory, and there is another which he has overlooked. *Nḥ 2 ḥnt 5* must mean literally, as P. says, "summon 2 out of 5," and in this connection it should be pointed out that an expression *2 ḥnt 5* (without *nḥ*), with meaning $2 \div 5$,

¹ From my collation of the originals.

² *R* cannot mean "with."

or $\frac{2}{5}$, or any other meaning, does not occur; *hnt* 5 is then an adverbial clause dependent on *nh* 2. Otherwise it might be possible to translate "formulate (2 out of 5)," although this would break down when the numbers are reversed, for "5 out of 2" means nothing, as P. implies. Now the answer to "summon (or, call forth) 2 out of 5" is $\frac{1}{5}$, or as we say, $\frac{2}{5}$; and this is arrived at by the following calculation:

$$\begin{array}{r} 1 \quad 5 \\ \frac{2}{5} \quad 3\frac{1}{5} \\ \backslash \frac{1}{5} \quad 1\frac{2}{5} \\ \backslash \frac{1}{5} \quad \frac{1}{5} \end{array}$$

Here, by multiplying 5 by various fractions, we have "called forth" 2 (in the two parts $1\frac{2}{5}$ and $\frac{1}{5}$) out of it; and what has "called forth" this 2 out of it are the two fractions $\frac{1}{5}$, $\frac{1}{5}$, which form the response to the command "call forth 2 out of 5." To call forth 5 out of 2 we proceed in the same fashion:

$$\begin{array}{r} 1 \quad 2 \\ \backslash 2 \quad 4 \\ \backslash \frac{1}{2} \quad 1 \end{array}$$

Out of 2 we have evoked 5 (in the two parts 4 and 1) and this by means of the multipliers 2 and $\frac{1}{2}$, which latter constitute the answer. The phrase *nh A hnt B* thus refers to the actual arithmetical process with pen and paper.

Nh in nos. 44 and 56 seems to mean "call forth" or "formulate" the content from given data. *Nh*se, "reckoner," in no. 67 might have been mentioned in this connection (*cf.* also *Louvre C.* 167; *Petrograd Pap.* 1116 A, recto, 147).

For the subjectless *hpr m* in *Berlin Pap.* 6619, compare *Urkunden*, v, 30. 17: "There resulted (literally, Resulted in) the gods in the presence of Rē"; and *Denkmal Memphisiticher Theologie*, line 53, "(It) resulted in the heart } as a symbol of Atūm."
 "(It) resulted in the tongue }

P. 15. The word for "two-thirds" is shown by evidence at Saqqara, shortly to be published, to be not *r* 2, "two parts," but *rml*, "the two parts."

Pp. 17-18. The description of the Egyptian equivalent of the addition of fractions by common denominator might have been put more simply. In most cases (nos. 21-3, 32, 34, 36-8, 76) the reckoner simply divided the denominator of each fraction into the highest denominator (assigning 1 to the latter), quite regardless whether this was a "common denominator" in our sense or not; if one of the fractions to be added was $\frac{2}{5}$, he treated this as its reciprocal, $1\frac{1}{5}$. *E.g.*, in adding a series of fractions $\frac{1}{10}$, $\frac{1}{20}$, $\frac{1}{30}$, $1\frac{1}{20}$, he would perform this process by putting under these fractions the numbers $7\frac{1}{2}$, 2, $1\frac{1}{2}$, 1, respectively; total 12, which is $\frac{1}{10}$ of 120; answer, therefore, $\frac{1}{10}$. There is no need to believe that he consciously calculated the number of $\frac{1}{120}$ ths contained in each fraction, as P. considers; it is more likely that he treated them for the time being as whole numbers (*cf.* note below to pp. 38 foll.). But in the *ikm* or "completion" reckonings (nos. 7-20) special rules seem to apply; when $\frac{1}{2}$ and $\frac{1}{2}$ are added to the fraction taken, the "addition-number," as one might call it, is 28; when $\frac{2}{3}$ and $\frac{1}{3}$ are added, the "addition-number" is 18 (*cf.* remarks below to pp. 53 foll.). This disposes of all the cases except nos. 31 and 33, in which for some obscure reason the addition number is $1\frac{1}{2}$ times the number of the highest fraction, being 42 in both cases.

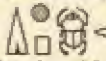
P. 20. That the Egyptian reckoner used tables for the purpose of taking two-thirds of a number seems to me quite doubtful. In the first place, no such tables are known before Byzantine times; we might well have expected one in *Rhind*, if it were necessary. Secondly, it was perfectly easy for a reckoner to take two-thirds of any number below 100 in his head, by splitting up the number in question into not more than three parts, provided that he knew by heart (as no reckoner could fail to do) the $\frac{2}{3}$ of about a dozen numbers, say of 2, 3, 4, 5, 6, 15, 21, 30, 45, 60, 75, 90, of which all but 4 and 5 are chosen for their obviousness. Thus, $\frac{2}{3}$ of 87 is $\frac{2}{3}$ of 75, 9 and 3; of 50, $\frac{2}{3}$ of 45 and 5; of 28, $\frac{2}{3}$ of 21, 6 and 1; and so on. Anyone will find that with a few minutes' practice he can do this mentally with ease. In some cases there are short cuts by subtraction; *e.g.*, $\frac{2}{3}$ of 29 is not only $\frac{2}{3}$ of 21, 6 and 2 but also $\frac{2}{3}$ of 30 less $\frac{2}{3}$ (of 1); $\frac{2}{3}$ of 74 is $\frac{2}{3}$ of 60, 9 and 5, but also $\frac{2}{3}$ of 75 less $\frac{2}{3}$ (of 1). Taking two-thirds of numbers higher than 100 by the same process is only a matter of extending one's repertory.

"His sole means of finding one-third of a quantity was to take two-thirds and then halve it." This is surely an overstatement. The fact that halving two-thirds is his almost invariable method of arriving at one-third on paper must not blind us to the other fact that the Egyptian, like everyone else, had ultimately no way of arriving at two-thirds but *via* one-third. I think that he used this roundabout method for

two reasons: first, that it was less trouble to acquire facility in taking two-thirds of a number, and to halve this when one-third was wanted, than to acquire the practice of taking both two-thirds and one-third mentally; secondly, that the method has this great advantage, that you can easily check your mental arithmetic by adding the two-thirds and the one-third together and seeing if the total equals the number operated upon. In other words, the two-thirds affords a proof of the one-third step. That this method is adhered to with such simple numbers as 3, 9, will be due merely to force of habit.

P. 22. 'It occurs *Siht*, iv, line 30 (not 130).

P. 23. Although *špwt* has the general meaning of "working-out," it certainly means "proof" in the table of resolutions, where it would have been more helpful so to translate it.

'*Irt ml hpr*. For this phrase P. cites, apart from the Rhind Papyrus, (a) *Urk.*, iv, 121. 14. To these, add (b) beginning of the rubric of Spell 125 of the *Book of the Dead* (best text, *Nu*), and (c) *Urk.*, iv, 1084. 4. (a) reads, following an appeal for the *hpr rdt ml-šwt* formula, *irt ml hpr, ml ntt r hpr, imrw hnt wd pn: ht-k m t, ht-k m h(n)ht...*; (b) reads *irt ml hpr m wšht tn nt mšst: qd-tc r pn wšb, twr...*; while (c) is an appeal for funerary prayers to every scribe who is capable, who is familiar with and reads writings, etc., *šbt-n imt-r r irt ml hpr*, "and whom a master has taught to..." This last example shows the *irt* to be infinitive, as is indeed fairly obvious from the *Rhind* examples; further, the position of the phrase here disposes of any such meaning as "doing as follows¹," in fact it can mean only something like "to act properly." It is probable that *hpr* is subjectless *šdm:f*, "as occurs" in the meaning of "as (it) is done," for we have an analogy in the frequent phrase in the Old Kingdom tombs , "get it done!" (cf.

ERMANN, *Reden, Rufe und Lieder*, 9). This gives us for the other examples, in which a procedure stands in apposition to it, "the doing as (it) occurs" or "as is done," i.e., "the proper procedure²." We can now translate the other two examples: (a) "the proper procedure, according to what is regular, the recitation (*l*) before this stela, 'Thy thousand of bread, thy thousand of beer...';" (b) "The proper procedure in this Hall of Truth: one shall recite this spell being pure and clean..." It is difficult to believe that in the Rhind Papyrus *irt ml hpr* does more than indicate the correct method with regard to some operation.

P. 25. "The *hekat* or bushel." But a bushel is nearly eight times as much as a *hekat*, which is $1\frac{1}{2}$ gallons! "Gallon" is a far better rendering.

That fractions of a gallon other than the dimidiated series ($\frac{1}{2}$, $\frac{1}{4}$... $\frac{1}{64}$) were not tolerated is not the case; we have *hkt* $\frac{1}{2}$, i.e., 33 $\frac{1}{2}$ gallons, not only in *Rhind*, no. 82 (called, p. 26, footnote 2, "a unique instance"), but also twice in *Kahun*, 15. 54, 55; further, 52 $\frac{1}{2}$ gallons, 3 $\frac{1}{2}$ gallons, 2 $\frac{1}{2}$ gallons, and 1 $\frac{1}{2}$ gallons (twice), *Kahun*, 15. 50-3, 18. 3, 4.

Footnote 4. Only no. 708 is wrongly reversed.

P. 26. The special signs for 5, 6, 7, 8 and 9 gallons (9 omitted in MÖLLER, *Hierat. Paläographie*, but occurring *Rhind*, no. 84) are doubtless all ligatures for groups of short vertical strokes, these ligatures taking a different course of development from those of the general numerals. It is noteworthy that in *Rhind* and the Middle Kingdom papyri the same special signs for 5, 6, 7, 9 are used for both gallons and *arurae*, except that Rhind uses ordinary 5 for *arurae*.

P. 33. *Ht m* here seems to be identical in meaning with *ḥt m* (literally "enter into"), often used of penetrating in the sense of understanding: cf., e.g., *Urk.*, iv, 350. 13, 903. 13, 1194. 12; *Ptahhotep*, 615; *Berlin Inschr.*, II, 55; *Rifeh*, iv, 49.

špwr here "to copy" a writing, not merely "to write." Clear examples, apart from this passage, are: *Denkmal Memph. Theologie*, Sabacon's heading; *Nu*, 137a. 37 (rubric); WILL, *Décrets Royaux*, Pl. IV, 1. In Ptolemaic times weakened to "to write, compose," cf. *Canopus* 17, 34 = γράφειν.

"In the likeness of" (*m ent r*); better, "according to."

Pp. 34-6. The very fact that there was no uniform method for calling forth 2 out of uneven numbers is the reason why these tables (with or without justificatory proofs) were in use.

Pp. 38 foll. Why are the numbers of the first lines reversed in the translation in every case? Not only is this quite unnecessary, but it really obscures the meaning. Thus, where P. gives "Divide 2 by 7. $1\frac{1}{2}$ is $\frac{1}{2}$ th, $\frac{1}{4}$ is $\frac{1}{4}$ th," the original has "Call forth 2 out of 7. $\frac{1}{2}$. $1\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$," that is, " $\frac{1}{2}$ (calls forth) $1\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$," the calling-forth fractions being written in red to make them as salient as possible.

The proofs contained in this long table repay a slightly closer study than P. has given them in his

¹ The text continues with epithets "calm, patient," etc.

² *Ml hpr* apparently means "properly" also in *Ebers*, 67. 5 (add 30. 16), BAUWISCH, *Wörterb.*, 1341, cited by Peet.

book. In the first place, they seem to contain evidence of an interesting application of an arithmetical proportion. Let us take, to begin with, $2 \div 7$ as it stands in the papyrus¹. We have, as proof that $\frac{1}{2}$ calls forth $1\frac{1}{2} \frac{1}{2}$ and $\frac{1}{2} \frac{1}{2}$ calls forth $\frac{1}{4}$:—

$$\begin{array}{r} 1 \quad 7 \\ \frac{1}{2} \quad 3\frac{1}{2} \\ \backslash \frac{1}{2} \quad 1\frac{1}{2} \frac{1}{2} \\ \backslash 4 \quad 28 \quad \frac{1}{4} \end{array} \qquad \begin{array}{r} 1 \quad 7 \\ 2 \quad 14 \\ \backslash 4 \quad 28 \end{array}$$

Here the 4 on the left indicates that 28 is 4 times 7, which is demonstrated on the right; that is, the proof that $\frac{1}{2}$ of 7 is $\frac{1}{2}$ is that 28 is 4 times 7. The left-hand 28 should of course have been dotted ($\frac{1}{2} \frac{1}{2}$). Another typical case is $2 \div 27$, where the proof that $\frac{1}{3}$ and $\frac{1}{4}$ call forth 2 is²

$$\begin{array}{r} 1 \quad 27 \\ \backslash \frac{1}{3} \quad 9 \\ \backslash 2 \quad \frac{1}{2} \frac{1}{4} \end{array}$$

Here the figure $\frac{1}{3}$ on the left³ evidently shows that $\frac{1}{3}$ of 27 is 9 because 18 (the reciprocal of $\frac{1}{3}$) is $\frac{2}{3}$ (the reciprocal of $1\frac{1}{2}$) of 27; and the 2 on the left shows that $\frac{1}{4}$ of 27 is $\frac{1}{2}$ because 54 is twice 27. In fact, the author of this part of *Rhind* has grasped the proportion $x : y :: \frac{1}{y} : \frac{1}{x}$, and has used this in his proofs wherever y is a multiple, or $\frac{1}{3}$, of x . In $2 \div 17$ we have the instructive computation

$$\begin{array}{r} 1 \quad \frac{1}{17} \\ 2 \quad \frac{1}{17} \\ \backslash 3 \quad \frac{1}{17} \quad \frac{1}{3} \\ \backslash 4 \quad \frac{1}{17} \quad \frac{1}{4} \end{array}$$

Now according to our ideas $\frac{1}{3}$ is not twice $\frac{1}{17}$ but $\frac{1}{2}$ of it, and so on; and it seems clear that the figures are to be interpreted: 17 and twice 17 are 51, and because 51 is 3 times 17, $\frac{1}{3}$ of 17 is $\frac{1}{3}$. It was not necessary to dot the 17 and 34, turning them into their reciprocals, for these numbers are only steps to show that 51 is 3 times 17. But the fact is that wherever it suited him the Egyptian reckoner regarded $\frac{1}{x} \times y$ as $\frac{1}{xy}$; see no. 61B, where $\frac{1}{2x}$ is called twice $\frac{1}{x}$, and $\frac{1}{6x}$ is called six times $\frac{1}{x}$. In $2 \div 41$ we have

$$\begin{array}{r} 1 \quad 41 \\ \backslash 2 \quad 82 \\ \backslash 4 \quad 164 \\ \backslash 6 \quad \frac{1}{2} \frac{1}{4} \quad \frac{1}{6} \\ \backslash 8 \quad \frac{1}{2} \frac{1}{4} \quad \frac{1}{8} \end{array}$$

Here similarly the first three lines are only steps to arrive at the last two. The last but one shows us that $\frac{1}{6}$ of 41 is $\frac{1}{6}$ because 246 is 6 times 41, and 246 is 6 times 41 because $41 \times 2 = 82$ and $41 \times 4 = 164$, $2 + 4 = 6$ and $82 + 164 = 246$. Peet, however, prints the middle numbers in the last two lines as whole numbers, 246, 328⁴, showing perhaps that he has not quite grasped the nature of the calculation. The use

¹ I use \div as a convenient symbol in references to these tables, although the papyrus nowhere speaks of 2 "divided by" a number.

² For the corrected disposition of the figures here, see below.

³ The numbers that should properly be ticked here are not $\frac{1}{3}$ and 2, but $\frac{1}{3}$ and $\frac{1}{4}$, and similarly in a large number of cases. The reason for putting the tick to the outside number seems to be merely lack of space.

⁴ Or, as I should prefer to write, $x : y :: y : x$. It would be very much better to discard our fractional notation in translations or discussions of Egyptian mathematical matter, and to reproduce the original notation by writing $\bar{2}$, $\bar{3}$, $\bar{4}$, etc., instead of $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, etc. In this way we should leave behind the non-Egyptian idea of a numerator, except with "the two parts" (our $\frac{2}{3}$), which might be rendered as $2p$ or $\bar{2}$. We should also do well not to talk of the denominators of Egyptian fractions, but of their "numbers" only; it would then be clearer why, to the Egyptian, $\bar{17} \times 2 = \bar{44}$.

⁵ It would surely have been better to reproduce in the translation the fractions or whole numbers just as they are found in the original, and to have corrected them, if necessary, in brackets or in the commentary, rather than to have changed them without comment (see p. 38, l. 5), which obliges the student constantly to refer to the transcription and the facsimile. P.'s corrections are, further, not consistent; contrast (by recourse to the facsimile) the translations of $2 \div 19$ and $2 \div 21$ with those of $2 \div 99$ and $2 \div 101$.

of the above-mentioned proportion may be the cause of the frequent omission of the dots, e.g., in $2 \div 21$, where we have

$$\begin{array}{r} 1 \quad 21 \\ \backslash \frac{2}{3} \quad 14 \quad 1\frac{1}{2} \\ \backslash 2 \quad 42 \quad \frac{1}{2} \end{array} \text{ which should be } \begin{array}{r} 1 \quad 21 \\ \backslash \frac{2}{3} \quad 1\frac{1}{2} \quad 1\frac{1}{2} \\ \backslash 2 \quad 1\frac{1}{2} \quad \frac{1}{2} \end{array}$$

Here the copyist was doubtless thinking, as he wrote, that $\frac{2}{3}$ of 21 is 14 and twice 21 are 42, and hence forgot to dot the 21 and 42.

It must here be pointed out that the greater number of these divisions of 2 by 3 to 101 are badly (that is, illogically) set out in the papyrus—in all cases, namely, but $2 \div 5$, 7, 9, 11 (?), 13, 15, 17, 19, 23, 37, 41. The badly set-out cases comprise all those in which 2 is called forth in the two parts $1\frac{1}{2}$ and $\frac{1}{2}$, and in addition nearly all those in which the first caller-forth is a high fraction either “found” or shown to be correct by applying the proportion $x : y :: \frac{1}{y} : \frac{1}{x}$. One example will suffice: $2 \div 27$ should take the form

$$\begin{array}{r} 1 \quad 27 \\ \backslash \frac{2}{3} \quad 1\frac{1}{3} \quad 1\frac{1}{3} \\ \backslash 2 \quad 1\frac{1}{3} \quad \frac{1}{3} \end{array} \text{ whereas it is arranged } \begin{array}{r} 1 \quad 27 \\ \backslash \frac{2}{3} \quad 1\frac{1}{3} \quad 1\frac{1}{3} \\ \backslash 2 \quad 1\frac{1}{3} \quad \frac{1}{3} \end{array} \text{ in the papyrus}$$

The reason for this is either the copyist's confusion with multiplication by $2\frac{2}{3}$, or else a desire to keep the initial dividend-numbers, which also serve as headings, as near the margin as possible, for ready reference; or both. The proper arrangement of the figures is observed in cases where there is progressive reduction of the first number by $\frac{1}{2}$, $\frac{1}{3}$, ... or by $\frac{2}{3}$, $\frac{1}{3}$, Peet has corrected in his translation the faulty setting-out of the original in nearly all cases, but not in $2 \div 21$, 27, 51, 57.

Although the proofs of this table are very various in their superficial appearance, three types account for all of them but three. These types are as follows:—

I. When 2 is called forth as $1\frac{1}{2} + \frac{1}{2}$, the denominators of the two fractions required are respectively $\frac{2}{3}$ of and twice the number operated upon. This relation is pointed out, which constitutes proof by the principle $x : y :: \frac{1}{y} : \frac{1}{x}$. $2 \div 21$, 27, 33, 39, 45, 51, 57, 63, 69, 75, 81, 87, 99, and in principle $2 \div 93$, belong to this class.

II. The number is reduced by either the $\frac{1}{2}$, $\frac{1}{3}$, ... series or the $\frac{2}{3}$, $\frac{1}{3}$, ... series, until the first calling-forth fraction is reached. The remaining fractions are proved by the above-mentioned proportion, and by appended multiplications where thought necessary. This class includes $2 \div 7$, 11, 13, 17, 19, 23, 37, 41; and $2 \div 5$, 9 really belong to it¹.

III. Proof of the first calling-forth fraction is omitted, being generally replaced by the word “found,” and the remaining fractions (except in $2 \div 91$, where both fractions are “found”) are proved by the proportion. To this class belong $2 \div 25$, 29, 31, 43, 47, 49, 53, 55, 59, 61, 65, 67, 71, 73, 77, 79, 83, 85, 89, 91, 95, 97.

This leaves us with only $2 \div 15$, which virtually belongs to class I; $2 \div 35$, the proof of which is *sui generis* and obscure to me; and $2 \div 101$, which breaks entirely fresh ground (see note thereon below).

The choice of the fractions employed in each resolution is evidently dictated largely by their convenience in calculations. For example, an even number is preferred as the denominator of the first fraction²; but if this would be paid for too dearly by the increase in the number of fractions required (as with $2 \div 25$) it is renounced. Facility in proving the fractions may be another factor.

P. 40, l. 5. The first “ $\frac{1}{2}$ ” is a misprint for $\frac{1}{12}$.

P. 47. Surely the proof of $2 \div 101$ should be restored thus:

$$\begin{array}{r} [1 \quad 101 \quad 1] \\ \backslash 2 \quad [202] \quad \frac{1}{2} \\ \backslash 3 \quad 303 \quad \frac{1}{3} \\ \backslash 6 \quad 606 \quad \frac{1}{6} \end{array}$$

It is, as P. says, quite likely that the resolution-tables of the period hardly went beyond $2 \div 101$, and any table has its limits, while numbers are limitless. What then is a reckoner to do when confronted with a high number for which the tables give him no resolution? The *Rhind* resolution of $2 \div 101$, so far from being the lame and impotent conclusion that P. considers it, is of the greatest value because in it the

¹ Because strictly speaking there should be a 3 before the $\frac{1}{2}$ in $2 \div 5$, and a 2 before the $\frac{1}{2}$ in $2 \div 9$.

² This rules out at once the use of the formula $\frac{2}{x} = \frac{1}{a} + \frac{1}{xa}$ (see p. 35), which would give an uneven denominator for the first fraction in half the cases.

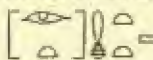
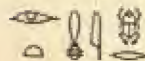
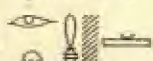


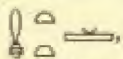
table furnishes the user, as a parting gift, with a simple formula by which without further aid he can perform all higher resolutions, with ease if not with elegance, namely, $2 \div x = \frac{1}{x} + \frac{1}{2x} + \frac{1}{3x} + \frac{1}{6x}$. E.g.,

$$2 \div 267 = \frac{1}{133\frac{1}{2}} + \frac{1}{267} + \frac{1}{400\frac{1}{2}} + \frac{1}{666\frac{2}{3}}. \text{ This formula is more cumbersome than } 2 \div x = \frac{1}{a} + \frac{1}{ax} \text{ where } a = \frac{x+1}{2}$$





(by which $2 \div 267 = \frac{1}{133\frac{1}{2}} + \frac{1}{267}$) but is certainly more manageable, and requires only the modest (and easily checked) multiplication $2x$, ($x + 2x =$) $3x$, ($3x \times 2 =$) $6x$.

P. 50, middle. The division of 1 loaf (no. 1) is perhaps given as a model of the method to be employed. Division of 3 and 4 loaves was perhaps omitted because the answers could be obtained from doubling the divisions of 6 and 8; division of 5 loaves may have been omitted as being self-evident.

P. 53, no. 4. The noun *nt*, the same word as the feminine "indirect genitive exponent",¹ seems to mean primarily something very abstract like "being," or better, the German *Wesen*. Thus with suffixes *nt-k*, *nt-f*, etc. (independent pronouns), *dein Wesen*, *sein Wesen*, i.e., "thou," "he." This meaning was not early lost sight of; in *Rhind*, no. 49, we have *nt-f pw m iht*, "das ist sein Wesen in Oberfläche." (The *nibho*-form of this, *nti*, originally "he who belongs to existence," means "he who exists.") *Nt pw* here, in nos. 4 and 6, must however mean, as P. says, something like "this (*pw*) is it (*nt*)," which agrees with the *Ebers* passage (90. 5): "Every member of his has its vessels, *id est* it (the heart) speaks through the vessels of every limb"—where *pw* functions as copula. I cannot agree with P., however, that the equivalent use of *nt* and *mitt* in these *Rhind* passages helps us much with the *Sinuhe* passages, where *nt* can hardly mean anything but "fact" (a sense very near that of "existence"): "Is it the fact that I have opened his door?" and "Is God ignorant of what he has destined to be known?" How is the fact?"

No. 5. Is the *mitt* really such a puzzle? Restore  and take as an error for , which is required here. The scribe was apparently uncertain which to write throughout this group (nos. 1-6); cf. , almost certainly *lrt ml[ut]* again, in no. 4 (ignored in the translation), and , with omission of  as in , in no. 6². The scribe may have been led astray by the occurrence of *mitt pw* at the end of these problems.

P. 56, no. 14. This bungled calculation would be correct, and in place (see below) if the quantity taken had been $\frac{1}{28}$ (with common denominator 28) instead of $\frac{1}{16}$.

No. 15. Not only would the existing answer be correct if the quantity taken was $\frac{1}{32} + \frac{1}{32}$, but the quantity taken here would then conform with the others in that the first fraction would be a multiple of the second; further, the common denominator, seen from the first column to be 28, requires the denominator of the second fraction to be 224, i.e., 28×8 . The sign  is not "an abbreviation of the verb *thi*, 'to be wrong,' 'to err,'" which at this period is still written   ; it stands either for the verb *thi*, "to be defective," or its causative "to falsify." The same abbreviation *Peasant*, Bl. 105, and cf. *VOGELSANG, Kommentar*, 94.

P. 57, nos. 18, 19. The reckoner evidently knew well that to get $\frac{2}{3}$ of a fraction with even denominator you take half as much again as the latter, and dot the result—a simple "dodge." Note that except with $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, which have special signs, the first fraction taken is undotted (i.e., stands as a whole number) in every case but two in nos. 7-20; is this from the scribe's preoccupation with the next step?


Pp. 53 foll. (nos. 7-20). P. regards these "completions" as experimental calculations in which a fractional quantity is taken, its $\frac{1}{2}$ and $\frac{1}{4}$ or its $\frac{2}{3}$ and $\frac{1}{3}$ added to it, and the result recorded when this happens to be an aliquot part. Quite another view seems to me to be possible:—

(1) The calculations contain many mistakes, and it is therefore not too arbitrary to assume that there

¹ The semantic connection between the two uses is well seen from a compound like *nt hsb*, which can be equally well rendered "Rechnungswesen" and "what belongs to reckoning."

² For *thi-nf rh* cf. *Berlin Leather*, 1/8.

³ Which stood in nos. 1, 3, we cannot tell.

⁴ The sign in *Prisse*, 1/3 is surely  merely, as elsewhere with *thi* in that MS.

are also one or two mistakes in the sequence. No. 8 is obviously out of place, for, being of the $1 + \frac{2}{3} + \frac{1}{3}$ type, it belongs among nos. 16-20. If we further put the faulty no. 9 at the head of the list, and accept P.'s clearly correct emendation of it ($\frac{1}{2} + \frac{1}{4}$), then we have, after nos. 14, 15 have been corrected as indicated above:—

A. A series of nine "completions" which are all additions of $\frac{1}{2}$ and $\frac{1}{4}$ to the quantity taken, in which the common denominator is 28, and in which the quantities taken follow a descending order of magnitude¹: $\frac{1}{4}, \frac{2}{7}, \frac{3}{7}, \frac{1}{2}, \frac{1}{14}, \frac{1}{14}, \frac{1}{14}, \frac{1}{14}, \frac{1}{14}$, with a correspondingly dimidiated series of totals, $1, \frac{1}{2}, \frac{3}{4}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}$; and

B. A shorter series, falling into two sub-groups (nos. 16, 8; nos. 17, 18, 19, 20), which are all additions of $\frac{2}{3}$ and $\frac{1}{3}$ to the quantity taken, in which the common denominator is 18, and in which the quantities taken again follow a halving order: $\frac{1}{2}, \frac{1}{3}, \frac{1}{3}, \frac{1}{6}, \frac{1}{6}, \frac{1}{6}, \frac{1}{6}, \frac{1}{6}, \frac{1}{6}$, with totals $1, \frac{1}{2}, \frac{2}{3}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}$.

(2) P. says, p. 35, footnote 1, "The ignoring of the fact that to add to a number its third and its two-thirds is equivalent to doubling it is a further testimony to the experimental nature of these calculations." But it is out of the question that any Egyptian reckoner could possibly have ignored this most elementary fact. Nos. 16, 8, 17-20 must have had some other purpose than merely to double fractions in this roundabout way. It would seem that in nos. 7-20 we have two sets of completion tables, arranged—in the archetype—in a progressive sequence to facilitate reference, some of them furnished with proofs by common denominator, each calculation being intended to furnish a number of useful data. To take a simple case, no. 18:


	1	$\frac{1}{2}$
	$\frac{2}{3}$	$\frac{1}{3}$
	$\frac{1}{3}$	$\frac{1}{3}$
Total	$\frac{1}{2}$	$\frac{1}{2}$

supplies answers to the questions: what is $\frac{2}{3}$ of $\frac{1}{2}$? what is $\frac{1}{3}$ of $\frac{1}{2}$? what is $\frac{1}{3}$ of $\frac{1}{2}$? what is $\frac{1}{3}$ of $\frac{1}{2}$? what completes $\frac{1}{2}$ to $\frac{1}{2}$? what completes $\frac{1}{2}$ to $\frac{1}{2}$? what completes $\frac{1}{2}$ to $\frac{1}{2}$? what completes any two of these to $\frac{1}{2}$?


P. 58. Are the two groups, nos. 7-20 and 21-3, so different as P. declares? In no. 21, for instance, the reader is told to complete $\frac{2}{3} + \frac{1}{3}$ from 1, i.e., to find what completes $\frac{2}{3} + \frac{1}{3}$ to 1: answer $\frac{1}{2} + \frac{1}{6}$. But this information might conceivably have been found in the preceding group, from a calculation

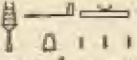
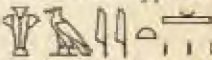
	1	$\frac{1}{3}$	$\frac{1}{6}$	$\frac{1}{6}$
	$\frac{2}{3}$	$\frac{1}{3}$	$\frac{1}{6}$	$\frac{1}{6}$
	$\frac{1}{3}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$
Total	1			



The reader would then have picked out his two $\frac{1}{3}$'s and his $\frac{1}{6}$'s, and have seen in a moment that he was left with $\frac{1}{2} + \frac{1}{6}$. But in the absence of such help, he is here shown how to solve the problem for himself.

 in the sentence *škm m X m Y* is probably the not infrequent enclitic which follows an imperative; the translation is thus "Complete *x* from *y*!" "What?" in such a sentence would almost certainly be *tn-m*, placed at the beginning, compare *tn-m dd šw*, "what says it?" in nos. 35, 37, and *Kahun*, 8. 24. This view is supported by no. 23, where *škm* is certainly in the imperative. The interrogative *m* as subject of *šgm-f* at this period would be very abnormal, if indeed possible.

Note the two constructions *škm m* and *škm r*. The difference is perhaps hardly brought out by P.'s "complete into" and "is complete up to." I would translate *škm X m I* as "complete *x* from 1," i.e., taking 1 as the source of completion, and *škm r I* as "is complete up to 1," with *P.*, i.e., adds up to 1.



P. 59, no. 22. "Majority" brings out the meaning of  as "excess."

P. 61. P. says of *šh*, "(mathematical) quantity," that it "is a good example of the concrete nature of Egyptian mathematics" because it means literally "a heap." But the determinatives indicate the opposite of anything concrete;  is "quantity" in quite a general sense, like  "surface." After all, some of our own technical terms have a sufficiently humble origin, e.g., cylinder, cube, trapezium, mass, "literally" a roller, a player's die, a small table, a cake.


P. 63, no. 28. One could translate "*š* coming in (*m š*) and (later) *š* going out (*m prt*)." The abbreviated writings  or  for *š prt* are frequent in religious texts of the New Kingdom, e.g., *Urkunden*, IV, 464. 15, 1193. 2; *PRIHL, Inschr. Hiérog.*, I, pl. 9; *SHARPE, Egn. Inschr.*, I, 106. 6. Here the infinitives follow the preposition *m*, as is normal with verbs of motion.




¹ Expressed here in modern notation for clearness.

² Undotted in the original.












P. 66, no. 30. The translation "10 is $\frac{2}{3} \frac{1}{10}$ of what?" is preferable, as not  but  is the writing elsewhere in this papyrus (nos. 35, 37), and in this period, for "what?" "who?" beginning a sentence. *Hpr-n*, "has become," probably means merely "is."


Dd šw, "he who says it," which is common in mathematical problems (here and in nos. 32, 35-7; *Kahun*, 8. 24, 28), is quite remarkable. Why *šw* and not *št*?

P. 72, no. 35. The much-discussed *iw-š hš-kwi špw 3 r hšt*, ... *iw-š mš-kwi* will perhaps bear a few words more. *Iw-š hš-kwi* is certainly perfect: "I have gone down 3 times" and not present, as P. translates; verbs of motion in the first person singular of the pseudoparticiple are frequent in narratives. The geminated form is a problem not elucidated by reference to SETHE, *Verbum*, II, 116; for the two other examples which S. cites are probably both participles in non-verbal sentences: "The things (berries) which go down (come forth)...are like...." But the existence of the geminated pseudoparticiple with verbs II gem. (*op. cit.*, 106) may throw some light on the matter. The difficulty in translating this passage in the past has been the failure to see that "I" is a quantity which changes with every step: "I (*x*) have gone down 3 times to the gallon measure, and a third of me (*x*) being added to me (3*x*), I (3 $\frac{1}{3}$ *x*) become (or, return) complete." It is a moot point whether  here is an auxiliary "become" or really "return."







P. 76.   here is probably *šm-f pw*, in which *pw* often has to be translated "for." P.'s statement, p. 77, n. 1, that "there are no passive examples known" is wrong; cf. *Nebeni*, 17. 10, 19, 20, *Nu*, 18. 23-4. *Ir-tw* written  also in no. 64.

P. 77. The "backbone," which is the literal meaning of *št*, is itself a series of parts (vertebrae), and thus the word might very naturally be transferred to mean an arithmetical series of parts.

The interesting word *twaw* is derived from the verb *tw*, stated by SETHE, *Zeitschr. f. äg. Spr.*, 57. 38, to mean "to strike." In *Ebers*, 101. 13, this meaning is precluded by the determinative  (as with *twaw* in *Rhind*), and there it evidently means "to rise": "As to moving-up (  ) of the heart, that is that it displaces itself away from his left breast, so that it rises above its foundation (*mkt*¹) and moves away from its place²." The other examples quoted by Sethe seem to mean "to rise" (with hostile meaning) or "to raise." Cf., further,    , "swelling" or "rising," *Kahun*, 7. 39;   , connected with the rising of the Nile, DUMICHES, *Tempel-Inschriften*, I, Pl. 81, line 23. The meaning "rise" gives us for the noun *twaw* something like "superiority" in the sense of "excess," or possibly "rising" in the sense of "(arithmetical) progression" (cf. no. 40)³.

It is not clear whether *š 100 n š 10* means "10 men have 100 loaves," or "100 loaves among 10 men" with *n* () distributive as after *pš*.

P. 80. "Volume" or "space," rectangular unless otherwise stated, seems to be the meaning of *šc* here. Another occurrence of this word, differently written, in which the sense "container" is impossible, is:

















"The Lady of Darkness⁴...whose height is not known from her breadth,      , whose extent in space (or volume) is not ascertainable," *Nu*, 146. 23-4.

Nos. 41-4. The words *hšt pw r-f* etc. are translated by P.: "This is the amount that will go into it in quadruple-hekat, namely (or, viz.) *x* hundreds of quadruple-hekat of corn." The correct translation is

¹ For this word cf. *Zeitschr. f. äg. Spr.*, 45. 116.

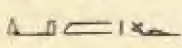
² The next section deals with the opposite case in which the heart "sinks, and stays below."

³ It is possible that *twaw* comes from a coalescence of both *den* and *tw*, for while the Bohairic form indicates *den* as the original, the meaning of *twaw*, "raise," "rise," agrees better with *tw* than with *den*, which means rather "to stretch out." This idea receives some support from the late mixed writings

   , *Zeitschr. f. äg. Spr.*, 45. 118,    , *ibid.*, 8. 19,    , *ibid.*, 30. 121, and the remarkable writing *Piankhy*, 108;    , "stretch out (wings)," DUMICHES, *Temp.-Inschr.*, I, 63. 2, 99. 19; BUCASCAN, *Dict. Géog.*, 1385.

⁴ Referring to a pylon.

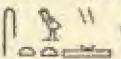

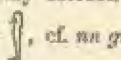
surely "what goes into it in quadruple gallons is x hundreds of gallons of corn." *Pw* is in the correct position for either interpretation; but the apposition assumed by P., who supplies "namely" or "viz.", is rather forced (we should expect an *m* or another *pw*—cf. nos. 75–8), and there is only one mention of quadruple gallons, not two.

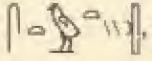
Nos. 41, 42.  probably imperative, as often: "add its half to it."

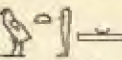

P. 81. "Amount" suits every instance of *rht* cited in this passage. It is not "obvious" at all that it is derived from *rh*, "to know," for *rht* is masculine, as is its later form *pwg*, "measure, quantity," and the *t* is therefore hardly the feminine ending. It comes probably from a 3 rad. root *rht* > *pwg*, "to measure," intrans. "to suffice".


No. 42. The writing 10·10 for "10 × 10" is noteworthy.

P. 86, par. 3. *Ht-n* is not relative but finite *sdm-n-f*, for it is preceded by "a container"; but this does not affect P.'s remarks on the meaning.

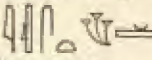
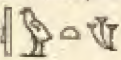
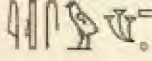
The reading  was proposed, as an alternative to *ht* *rht*, by Eisenlohr (*op. cit.*, 95, 131, 261), and is undoubtedly correct. One meaning of *htet* is "to collect, gather together," and it is sometimes written without , cf. *nn grt* →  *mdt pw*, "and it is not a (mere) putting of words together,"

Urk., iv, 973. 12, and, with probably a different meaning, , Brugsch, *Wörterbuch*, 1341. The

verb  was apparently IVae inf. (compare *tootie* with *moete*, etc.), and the ending  for the infinitive of the causative of this class is quite regular (cf. SETHE, *Verbum*, II, 715). *Stet-f pw* in three out of its four occurrences in *Rhind* refers to the product of a multiplication, and in the fourth (no. 60) it refers to the quotient of a division, and it seems probable that the word means arithmetical "product" and "quotient," both of which are usually arrived at in Egyptian arithmetic by "putting together."

P. 88, no. 47. It is hardly necessary to emend the text here. We can translate: "If a scribe says to you, 'Let me know $\frac{1}{10}$ (of 100 quadruple gallons) when it becomes a rectangular or a circular volume'...." This gives an atmosphere of futurity to the whole section, and it is therefore quite possible that we are to read  and not "ditto" in the lines that follow: " $\frac{1}{10}$ will be 10 quadruple gallons" (cf. *iw-f r imr*, "he will be a friend").

Nos. 49–55. I feel that in a mathematical treatise *ht* would be best translated (with Eisenlohr) by "area" or "superficies," and *rht-f m ht* not by "its area in land," but "its amount in area."

P. 90, no. 49. The word  (cf.  *Sidat*, I, 293) may be connected with *iw*, "exchange" (written  *Nu*, 112. 3), and may therefore mean "converting" into area from given dimensions.

Footnote 4. The scribe has wrongly written the special sign "6" used for *arurae*.

Pp. 91, 94, nos. 51, 52. *R rdt ifd-i*. SETHE, *Von Zahlen und Zahlworten*, 119, takes *ifd* here as a verb, translating "um es viereckig werden zu lassen." That a verb *ifd* existed is shown by *El Bersah*, I, 14. 6, where we find it in the pseudoparticiple.

P. 91. "The striking phrase 'This is its rectangle.'" The phrase is discussed at length on p. 92, but it does not occur in the papyrus. P. is doubtless speaking of *r rdt ifd-i*.

Spdt. "The pointed (figure)" does not necessarily refer to a triangle with short base and sharp vertex; for all triangles have at least two "points" (acute angles), and many have three. Thus there can be no etymological difficulty in applying the term *ipdt* to all triangles.

Tp-r. "Base" of a triangle is surely a purely relative term, depending entirely on which way up a geometer sets his figure. In the *Rhind* diagrams the *tp-r* is on the left. With isosceles triangles *tp-r* is obviously identical with our "base"; with right-angled and scalene triangles it was perhaps the side subtending the right angle and the widest angle respectively; with equilateral triangles it might be any of the sides. With the *ht* it is clearly the side opposite the truncation².

¹ Cf. SPIEGELBERG, *Kopt. Handwörterb.*, 106.

² Perhaps the *ht* was regarded as always having its two sloping sides and their angles equal, i.e., as being truncated isosceles triangle.

Mryt. There can be no reasonable doubt that this is equivalent to what we call the "height" of a triangle. That the geometers of the Middle Kingdom were stupid enough to calculate the area of a triangle by the formula $\frac{tp-r}{2} \times \text{length of another side}$ is hardly conceivable. To the Egyptian, however, the idea of "height" would be strange in this connection, for not only did triangles, to his concrete mind, mostly lie flat on the ground, but further the *mryt*-dimension runs horizontally in his figures of triangles. I suggest that the *mryt* is a pair of lines forming a right angle with each other, one of them meeting one

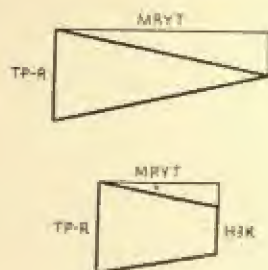


Fig. 1.

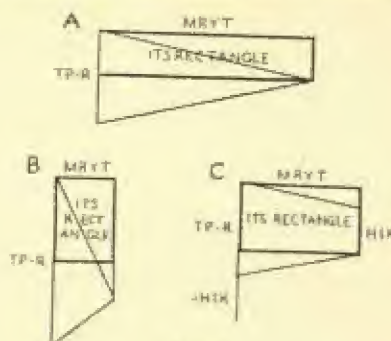


Fig. 2.

end of the *tp-r* at right angles thereto, the other joining the vertex, or, with a truncated triangle, the line (*hkk*) opposite the *tp-r* (Fig. 1). This view has the following points in its favour:—

(a) It explains the words *r rdit ifd-i*. In no. 51 we are told to take half the *tp-r* of a triangle in order "to give its rectangle" or "to cause it to be rectangular." By taking the half-way point, and drawing a line parallel to the *mryt*, we at once get the desired rectangle (Fig. 2, A). With scalene triangles the same occurs, provided the *mryt* is set out from that end of the *tp-r* which is farthest from the apex (Fig. 2, B). In no. 52 we are told to unite the *tp-r* and the *hkk*, and then to take half the total, "to give its rectangle." By following these instructions geometrically we get what is obviously the rectangulation of the truncated triangle (Fig. 2, C): for if the two sloping sides are equal, as probably they always are (see above), the line drawn from the point $\frac{tp-r+hkk}{2}$, parallel to the *mryt*, will meet one end of the *hkk*.

(b) Such a pair of lines forms a convenient way of ascertaining the length (or "height") of a triangle, besides forming part of the rectangulation which is to follow.

(c) It perhaps explains why the diagrams give the length of the *mryt* not inside the triangle between the *tp-r* and the apex, or *hkk*, but over the triangle.

(d) Lastly, *mryt* means a "quay," and a quay, seen in section, consists of two lines forming a right angle, levelling up a sloping line (that of the river-bank) to the horizontal, which is exactly what our *mryt* does¹.



It may be objected that this *mryt* is not shown in the *Rhind* figures, and that we are told nothing about drawing lines. But the writer is concerned less with geometry than with arithmetic, and he leaves the phrase *r rdit ifd-i* unexplained, confining himself as closely as possible to the numerical processes.




Pp. 93-4. Mr. J. H. Cole, of the Egyptian Survey Department, informs me that the methods of calculating the area of four- and three-sided fields exhibited by the long Edfû inscription are precisely those used by Egyptian natives to-day. I am unable to find out if there is still any native method innocent of the "nisba" (our π) for calculating the area of a circle.

P. 96, no. 55. The phrase *hbt ift 3 (m) fht hnt ift 5* can only mean "to subtract 3 *arurae* from 5 fields," and the problem therefore is: given five *arurae*, how much must be subtracted from each (equally) to make up 3 *arurae*? It is found that what calls forth 3 out of 5 is $\frac{2}{5}$ $\frac{1}{10}$, or $\frac{1}{5}$ *arura*, 10 cubits-of-land, which is of course the answer. P.'s translation "To divide 3 *setet* of land into 5 fields" is not tenable, and

¹ That the *mryt*-dimension is expressed by the phrase *mh x hr mryt-i*, "x cubits upon its *mryt*," and the *hkk*-dimension similarly, while the *tp-r*-dimension is expressed by *mh x m tp-r-i*, "x cubits in its *tp-r*," like *m fuf*, *m ktyf*, *m fhyf* in nos. 43, 44, *m whf-fbt*, *m pr-m-uf*, *m fhd*, *m fnt*, *m fty n hrw*, 56-60, is a small point worthy of attention.




means something quite different, although it suits the working-out and the answer equally well. Similarly with no. 54.




Pp. 97 foll., nos. 56-59B. There is no doubt that P. has rightly identified the *wšḫt-ḫt*, the *pr-m-wš* and the *ḫḏ* with the length-of-side, the height and the batter of a pyramid respectively. *Wšḫt-ḫt* probably means "what the base requires (in length)," *ḫt*, "sole of the foot," being a most natural word to use of the under-side of an object. *Pr-m-wš* will mean "what goes (straight) up from the $\textcircled{\cap}$." The exact meaning of *wš* here is unfortunately obscure; meaning a sacred chamber in a temple, the word occurs in the writings $\textcircled{\cap}$ , GREENE, *Fouilles*, Pl. 6, l. 21; , DÜMICHEN, *Tempel-Inschriften*, 1, Pl. 47, l. 7;

cf. further "thou shalt open the    over (T) the Ennead, to see the mystery of what is in it (the Ennead)," LACAU, *Textes Religieux*, 20, 10, 13. If the *pr-m-wš* was a line going vertically from the centre of the base to the apex, *wš* might possibly mean the sarcophagus-chamber, which normally lies under the apex, though below ground-level and thus not a satisfactory starting-point for the height-line; but if the "height" was regarded as a vertical line rising from the edge of the pyramid (cf. *wryt*, above), *wš* will have to be sought near the lowest casing-stones. *Ḥḏ* will come from *ḫḏ* with the sense of "to turn," and will mean the "deflection" from a vertical line rising from the edge of the pyramid (perhaps the deflection from the *pr-m-wš*).

In the five problems dealing with pyramids, one of these three data has to be ascertained, the other two being given; in three cases the batter is to be found, in two cases the height. Any modern book of this kind would have done the thing completely, requiring the student to find also the length of side, the height and batter being given. That no such problem is included here is further evidence of the entirely practical aims of the Egyptian mathematician; for who would be such a fool as to decide on the height and batter of a pyramid before he had settled how much ground it was to occupy?




P. 98, last paragraph. Is the result "illogically" stated in cubits, or are not cubits understood in the formulation of the problem? The latter seems much more likely in view of the concrete nature of these exercises. Cf. no. 57, "a pyramid 140 in length-of-side and 5 palms 1 finger in its batter," where "cubits" must be understood after "140."

P. 99, bottom. *ʿIw* occurs also in no. 86. 5. Cursive , as in no. 67. 3, suits the traces after  here, and also what P. regards as an "unusual form" of  after the same word in no. 56. In 58 we then have *ʿIw* *ir mḥ pn šp 7² pw*, "while⁴ as to this cubit, it is 7 palms," as though to warn us that it is not the "short cubit" of 6 palms; if this is right, we must emend in no. 56 *ʿIw* (*ir*) *mḥ pn šp 7* (*pw*).



P. 100, no. 59. The last words of this problem are possibly a corruption of   .



No. 59B. 7 palms, not "7 spans." The batter in no. 59, taking the height and side as they stand, would be 2 palms, 1½ fingers, not "2½ spans."

For "a pyramid of 12 (cubits)," meaning, of 12 cubits in length (of side), cf. the Turin specification of the tomb of Ramesses IV, *Journal*, iv, 134 foll., where "of *x* cubits" is the regular expression of length.

No. 60. The determinative  of *ʿIw* by no means makes it clear that a structure is meant; cf. , . And the same writing occurs *Ebers*, 58. 8, in "the pillar is fallen into the water."

P. 104, no. 61A. *Tit gbt*. P. considers this to mean "aliquot part" and to be synonymous with *tit* in no. 70. This is very unlikely, on the face of it. I believe that *tit gbt* means an *uneven* fraction, $\frac{2}{3}$, $\frac{1}{2}$, $\frac{1}{3}$, etc. For $\frac{2}{3}$ of an uneven fraction must be expressed in Egyptian by two fractions, which is what we are told to do here, while to treat an even fraction in this way, by taking "its double and its six times" (e.g., $\frac{2}{3}$ of $\frac{1}{2} = \frac{1}{3} + \frac{1}{6}$) is foolish, since all that is necessary is to take $1\frac{1}{2}$ times the number and dot it (e.g., $\frac{2}{3}$ of $\frac{1}{2} = \frac{1}{3}$).

¹  here perhaps transferred from the Late Egyptian $\textcircled{\cap}$ , "how much!" appended to adjectives.

² Var.   (confusion with *wšḫ*).

³ Misprinted "šp 4" in line 5 from bottom of the page.

⁴ *ʿIw* before *ir*, here and in no. 62, seems to have circumstantial force, difficult to bring out in translation. In *Urk.*, iv, 366, 13 it is however an instance of the *ʿIw* used after oaths.

a short cut that was certainly known to the reckoner (*cf.* note above to nos. 18, 19)¹. Note further that an uneven fraction, $\frac{1}{2}$, is taken to illustrate the rule. Thus *tit* will mean "fraction" in general, but *tit gbt* an "uneven fraction." The exact meaning of $\overline{\Delta} \int \times$ in this connection is not easy to determine; its use

Anastasi IV, 10. 1, of a year that is not even with the natural seasons may be relevant, also its use in *Anastasi* I, 6. 7, of being "out" or "short" in accounts. *Wt tit* in *Kahun*, 8. 50, cannot mean "one fraction," which in Middle Egyptian would be *tit(f)t wt* or *wt m tit(f)t*.

P. 104, no. 62. Probably "this bag is (customarily) bought for 84 rings," not "has been bought," *iw idm-tu* forming paradigm with *iw f idm-f*.

P. 105. *Hpr hr m 4 didk-k n t t nbt*. To translate "the result is 4, which you assign to each metal," assumes an abnormal use of the relative. Why not "the result is 4; you assign (that) to each metal"?

P. 106. The interpretation of l. 9 as containing *idm-f pw*: "for one multiplies," or "*id est*, one multiplies..." is doubtless correct.

The writing $\overline{\Omega} \int$, with the abstract papyrus-roll and plural strokes (in the singular) is remarkable.

In *Bulaḥ Pap.* 11 it is also written $\overline{\Omega} \int$; elsewhere the writing is $\overline{\Omega} \int$. Is *kt* in *Rhind* and *Bulaḥ* 11 a non-concrete unit of value? I find no evidence that the word means "ring."

P. 108, no. 64. Note the use of *hr*: "you are to subtract $\frac{1}{8}$ gallon in respect of each man." *Hr* is elsewhere used thus in similar contexts; *cf.* " $\frac{1}{8} \overline{\Delta} \dots$ in respect of one of these days," *Sitt*, I, 287, 300; "giving him a white loaf in respect of each one of them," *ibid.* 290, 307, and *cf.* 294, 298, 299.

Here, and in nos. 70 and 71, occur non-verbal sentences containing both *m* and *pw*, which seem to P. "redundant, either *m* or *pw* being unnecessary." I think he has not fully understood the structure of these sentences. In no. 64 we have: "10 gallons of barley among 10 men; the excess of each man more than his neighbour in gallons of barley, it is $\frac{1}{8}$." In no. 70: "As to the requirements of a unit of bread in flour, it is $\frac{1}{16}$ $\frac{1}{8}$ gallons and $\frac{1}{8}$ ro." In no. 69 we must emend the corresponding sentence by adding a *pw* at the end; as it stands it is faulty. The sentence in no. 71 means "it is a strength of (m) $\frac{2}{3}$," with a somewhat unusual position of *pw*. *Pfaw m X* in no. 70 is perhaps a full writing of *pfaw X* in no. 69.

Škt. Another occurrence of this difficult word, *Lebensmilde*, 139: "death now seems to me like a revelation(?) of heaven, like a man who attains(?) thereby to what he was ignorant of." Also obscurely *Rifeh*, VII, 51. In *Rhind* the meaning seems to be "to include the last man."

P. 109, no. 65. "You are to add up the crew, result 13." I doubt that *rmjt tpr* means "the crew" here. Apart from the facts that it is *tpr* that means "crew," and that *rmjt* *ist* is Late Egyptian, the point is here that there are only 10 men, but that as 3 of them receive double rations, the first step is to treat each of these 3 men as 2 men, and then see how many "men," each receiving an equal ration, we now have. The answer is $7+6=13$. These fictitious 13 men are referred to as *rmjt tpr*, but to bring this out in translation is beyond me. Evidently *tpr* here is the verb "to acquire," "take possession."




P. 111, no. 68. *Ir m sp 12* in line 7 of the text is hardly "Multiply by 12." It connects what precedes and what follows: "...making in corn $3\frac{1}{4}$ $\frac{1}{16}$ $\frac{1}{8}$ gallons $1\frac{2}{3}$ ro, which makes, by 12 times for the first, 8 times for the second," etc.—then follow the calculations.

Footnote I. The cases cited from the *Shipwrecked Sailor* are graphic only.




P. 112. "List of these." *Štehl*, "summary" rather than "list"; *iwk* = "to collect."

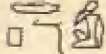

P. 113. *Hrt* in nos. 70, 73, 76, "requirement" rather than "content."

P. 114. P. considers the equation *gdw = noeit* "phonetically far from satisfactory." It is quite sound; we are dealing here with one of a class of biliteral words which in the nominal form possess an internal *y* lacking in the verbal forms and not written in any; *cf.* *tpr*, "food" = *oeit*; *tpr*, "call" = *oeit*; *gdw*, "stela" = *oeit*; *ntw*, "fornicator" = *oeit*; *sw*, "lord" = *oeit*.


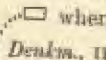
P. 118, no. 71. *Dp-n-tu-f r pfaw m*. *Dp* is written with the same "strange determinative" *Ebers*, 98, 17 (noted by Eisenlohr), where pilules for sweetening the breath are called    1. In *Ebers*

¹ Against this it may be objected that $\frac{1}{2}$ of $\frac{1}{2}$ are actually stated in no. 61 to be $\frac{1}{4}$ $\frac{1}{8}$; but this expression is so unnecessary as practically to amount to a mistake. Everywhere else in *Rhind* $\frac{1}{2}$ of an even fraction is expressed in one term.

² Emend  to  or .

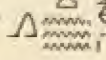
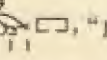
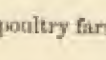
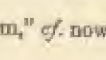
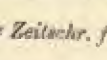
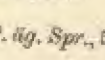
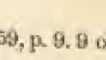
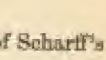
102. 9 the word "taste" is written in the normal way, , and it is very probable that in  we have a different word. Any translation of the *Rhind* passage containing the verb "taste" makes more or less nonsense, for tasting does not affect the strength. A meaning "to make mild" would suit both cases: "it has been weakened to what strength?" and "mouth-sweetener"; but the determinatives do not indicate this sense.—*Pfaw* *m* for "what strength?" with *m*, "what," in apposition to *pfaw*, seems to me just possible.

Pp. 118–19, no. 72. The last sentence gives a good sense if we take the *pw* as having the words after *mī dā n-k* for antecedent, and put stress on "450":—"If you are told '100 loaves of strength 10 are exchanged for a quantity of loaves (of strength) 45...,' then you shall say, 'That is the exchange of the 100 loaves of strength 10 for 450 loaves of strength 45.'" This gives point to the "the" before "loaves." I doubt whether *sdm-f pw* would be found with passive *sdm-f* (so-called *sdm-f*).

P. 122, no. 80. I would translate: "As for the measuring-vessel with which one measures-out¹ to the clerks(?) of the storehouse."  is, as P. says, unknown as a measure of capacity; on the other hand we have *hñ m ddb* "to measure out with the measuring-vessel" in *ddb pn hty-i phrt tn lm-f*, "this measuring-vessel with which I shall measure out this medicine," *Hearst Med. Pap.*, 14, 1, similarly *ibid.*, 14, 1 again, 14, 2. For the verb *hñ* determined with  when used of measurements of volume, cf. BISSING, *Gem-ni-kui*, I, Pl. 23; II, Pls. 9, 12; LEPSIUS, *Denkm.*, II, 103; *Peasant*, B1, 104 (*hñw*, "the measurer"); *Rec. de Trav.*, 5, 86; further *Sidd.*, v, 9, where we must translate "I caused my town to live as one who measures by the gallon."

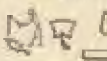

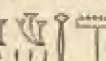

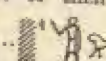
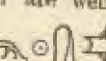
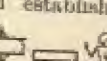
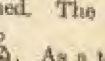
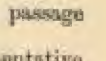

The *ddb* perhaps contained one gallon; the size of the measuring-vessels used in the Old Kingdom reliefs suits this, and it gives meaning to the heading of no. 80 in connection with what follows.

Šn. The rendering "slave-prison, *ergastulum*" (due, I believe, to Gardiner) is surely only secondary. Primarily it is clearly at most a warehouse in which wares are prepared as well as stored²; in the New Kingdom large numbers of foreign slaves were drafted into the temple warehouses, but these were only incidentally prisons, and it is less misleading to translate "warehouse" in all cases.



P. 125, no. 82. For        , "poultry farm," cf. now *Zeitschr. f. äg. Spr.*, 59, p. 9. 9 of Scharff's transcriptions.

No. 83. Sentences of the type *ir X, F pw* cannot correctly be translated "if *x* is *y*"; they mean "as to *x*, it is *y*." We must therefore render here: "As to the food of 4 ro-geese of the pen(?) it is one *hñw* of Delta-barley; requirement of one ro-geese, $\frac{1}{4}$ gallon, 3 ro. As to the food of a ro-geese which goes into the pond, it is $\frac{1}{8}$ $\frac{1}{2}$ gallon, 2 ro of Delta-barley (or) one *hñw* for one bird." Why the word *htmyt* "must be wrong" I cannot see; it may be a word for "pen," or more probably a collective, "cooped birds," and has no need to agree in gender with the ro-geese.


The whole of 83 looks more like a farmer's memoranda than a mathematical exercise.

P. 128, no. 85. It is certain that we have here an early example of the enigmatic writing, and not "a mere random group," for nearly all the signs are found in the enigmatic writing of the Eighteenth and Nineteenth Dynasties, and the values of most of them are well established. The passage is as follows:          

As a tentative interpretation I suggest *wh-k k if hpyt³..... f ml rht-nf*, "Interpret this strange matter [which the scribe NN wrote *h...*]... according to what he knew." The following is the justification of this attempt:—

 not known to me elsewhere⁴, but cf. *wh-k*, "to fish"; *wh-k*, "to interpret," is well known.  = *k*.


¹ Literally, with which is measured-out; *htyw* = *httw*.






² Read .


³ Even the little magazines in the mastaba of Mereruka are referred to as *šn* in the inscriptions over their doors.

⁴ The amount lost seems to be uncertain.

⁵ Cf. *hpyt*, "strange things," GARDINER, *Admonitions*, 97, where, however, all the examples have double p.

⁶  occurs in enigm. writing with value *hm*, which gives no sense here.

cf. SETHE in NORTHAMPTON, *Report on some Excavations in the Theban Necropolis*¹, 9*. 𓆎 = *t*, cf. SETHE, 12*. 𓆎 = *h*, cf.  = proper name *Mt-h-nhtw-f*, Leyden Stela V 93². : for the value *p* (from *pnw*) cf. SETHE, 4*, no. 22, where *hnp* seems to be the only possible reading.  = 𓆎 , cf. SETHE, 10*. 𓆎 with ordinary value in enigm. writing, cf. SETHE, 7*, no. 188. 𓆎 not known to me in enigm. writing; value might be *sed*, *wd*, *wt*, *d* or *d*. 𓆎 = *i*, *s*, SETHE, 11*. 𓆎 not known to me in enigm. writing; value might be *s* (from *snf*). 𓆎 (varies with 𓆎) has values *n* (SETHE, 11*), *nt* (DEVÉRIA, *op. cit.*, 67), *h* (see above). 𓆎 = *f*, SETHE, 8*.  for 𓆎 is common in late enigm. writing, but I cannot point to an earlier instance. 𓆎 , value uncertain; might well be *r*. It occurs several times in Leyden V 93 and Louvre C. 65³. 𓆎 value uncertain; most probable value *h* (from *ht*). It occurs Leyden V 93.  value *t* in late enigm. writing; occurs SETHE, 7*, no. 153, in damaged context. 𓆎 = *n*, see above. 𓆎 = *f*, cf. SETHE, 8*.

P. 129, footnote 4.  (*sic*) is omitted, if at all, before 𓆎 and not after it.

Footnote 5. There is no need to take *irt* as anything but infinitive in the *hnt-f* form.

PLATES⁴.



In the transcription considerable liberties have been taken with the original disposition of the calculations. This is very noticeable in Pla. A-D, where figures that in the original stand under the "title-number" are pushed so far to the left that the organic structure of the calculation, already badly treated by the scribe (see note above to pp. 38 foll.), is destroyed; extreme cases 2 ÷ 33, 39, 45, 51, 57, 63, 65, 87, 99. In sympathy, perhaps, with the scribe of *Rhind*, who had to squeeze his calculations between narrow rulings, P. has allowed himself insufficient space, with unfortunate results.


Pl. A, 2 ÷ 19. 𓆎 or *b* missing over 𓆎 twice in L. 2, and over 𓆎 in last line. 2 ÷ 21: $\frac{2}{3}$ and 2 on the right need the tick.



Pl. F, no. 3, l. 2. 𓆎 ; but 𓆎 only in the facsimile, Pl. E.



Pl. H, no. 22. Not  but ; cf. no. 79 and *Kahun*, 8. 62.


Pl. R. "61n" missing to left of 61.

Pl. S, no. 64; Pl. T, no. 68. The word *it*, "barley," is wrongly transcribed  instead of .

Pl. U, no. 70, left, line 10. Read  1.

Pl. W, no. 79; Pl. Y, no. 84. Read  not , at this period.

Pl. W, no. 81. For , which gives no sense, read .

Pl. X, no. 83B; read  No. 85: facsimile has 𓆎 , not 𓆎 .

¹ Cited hereafter as SETHE.

² The clearest reproduction DEVÉRIA, *Mémoires et Fragments* (Bibliothèque Egyptologique, v), Pl. 2.

³ Published DEVÉRIA, *op. cit.*, Pl. I; NORTHAMPTON, *op. cit.*, Pl. 12; both publications incomplete.

⁴ I have made no systematic collation of the transcription with the facsimile.

BATTISCOMBE GUNN.

Thèbes: la gloire d'un grand passé. By JEAN CAPART with the collaboration of MARCELLE WERBROUCK. Fondation égyptologique Reine Élisabeth. Brussels, Vromant. 1925.

M. Capart, with the collaboration of Mlle Werbrouck, has published a very fine *ouvrage de luxe* in this volume, which is published as the firstfruits and in the interest of the "Fondation Reine Élisabeth," which he has created at Brussels. In noble format, splendid typography and a reproduction of photographs *hors concours*, the book challenges comparison with the great works of the kind produced elsewhere. There are no fewer than 257 illustrations, for which M. Capart has chosen the finest photographs he could find, illustrating practically everything of interest at Thebes—temples, tombs and landscapes. And in his 352 pages of text he has written a description of the monuments of the great city of the past as we see them now in the light of modern Egyptological knowledge, that very completely covers the whole ground. Those who turn over its pages to refresh their memory or to explore previously unknown ground cannot fail to derive interest and pleasure from the perusal, while the student who desires to acquire additional knowledge will not be disappointed. Like others of its kind, its size and the heavily leaded paper necessary for the satisfactory printing of the half-tone blocks makes weight unavoidable; but it can be said that for one of its type the book is surprisingly light. Still, the tome (for it is nothing less) can only be read at the table or at a stand-up desk: it is too heavy for armchair reading, and the absence of binding makes it impossible to use without care lest it should fall to pieces of its own weight. This defect, and an additional one in the absence of an index, are regrettable, especially the latter. But these are the only two faults we have to find in a very fine book, well worthy of acquisition by those who like a fine book on a most interesting subject. It is difficult to say more of a volume of this kind: good wine of so popular a vintage needs no bush.

H. R. HALL.

Manuel d'archéologie égyptienne. 1. Les éléments de l'architecture, par G. JÉQUIER. Paris: Auguste Picard. 1924.

The volume under review is, to judge from the title, the first part of a complete manual of Egyptian archaeology. Whether the author intends to provide himself and his readers with illustrations on the grand scale of his *L'architecture et la décoration dans l'Ancienne Égypte* for the volumes to come we have yet to see; at any rate his decision on that point will materially affect the value of the work, for in this first part he depends very largely on that fine selection of photographs to illustrate his points, this notwithstanding a generous supply of line drawings and a number of reductions from the *L'architecture, etc.* in the text. M. Jéquier obeys his title very conscientiously. *Elements* for him are no more than the individual members which go to make up the body of a building. These he traces from the ground upwards. Beginning with the materials themselves—wood, earth (including bricks) and stone—he proceeds to describe in detail the development of foundations, walls, pylons, gateways, windows, stairs, columns and pillars, architraves, roofs and arches. To complete the building there are six more chapters on the accessories, namely the naos, sarcophagus—whose *raison d'être* in a book strictly devoted to architecture is based not so much on a comparison of its features with those of other architectural forms, as on the fact that its function is to be "une véritable maison" (p. 327) for the dead—altar, obelisk, stele and certain statues. The inclusion of these objects, however necessary to the completed building, seems sufficient justification for reproach when we find that in four hundred pages the author has not included a single complete plan of an Egyptian temple. But perhaps it were better not to complain till we have seen the second volume. In the discussion of the details themselves at any rate there is very little scope for additional remarks except when recent excavations have produced entirely new material. Such of course is the case as a result of the discovery of the shrine of King Zoser, and of the colonnade and mastabas by his pyramid. Even the minutely worked out chapters on the columns which form the most important thesis in the book now require revision in order to take the fluted column as far back as the Third Dynasty. M. Jéquier has given us for the first time a complete classification of the Egyptian orders, and it is difficult to believe that his classification can ever be further elaborated. He distinguishes ten different types of column, the last of which, the "composite column," is itself subdivided by twenty-seven varieties of capital. In regard to pillars, of which three types are noted, an important point is made by emphasizing the divorce between the Osiride and Caryatid forms: in the Osiride, though the figure is often of one piece with the pillar, it stands clear from the architrave and therefore serves no architectonic function, in contradistinction to the Caryatid which acts as a true support.

M. Jéquier's method is to give the facts and to be as sparing of comment as possible. He does however frequently allow himself the satisfaction of an artistic judgment, to quarrel or agree with which is the part of the reader rather than the reviewer. But possibly this appreciation of the beauty of Egyptian monuments may account for the fact that while his knowledge of the vagaries of all works in stone appears to be infinite he has barely done justice to the brick structures. This cannot be entirely excused on the plea that some of our most recent discoveries of such remains are not yet published. The German excavations of the years immediately preceding the War and our own of two seasons after it at Tell el-'Amarnah were already published in some part before M. Jéquier wrote. Yet, to take a single instance, there is no mention in the discussion of drainage (p. 53 ff.) of the elaborate washing arrangements with runnels to carry off the waste which are a common feature of the middle-class house at El-'Amarnah. Again the method of roofing over mud-brick houses is not mentioned at all. One might note other small points of omission, such as the common device for the decoration of ceilings by painting a vine growing on a trellis. In a work which sets out to cover so wide a field some omissions must always occur; but M. Jéquier should hardly have dealt so summarily with the brick-work, even though it is found in such comparatively small quantities. The important point is, however, that M. Jéquier has covered the field of stone architecture with a thoroughness for which all students of Egyptology must be grateful to him. One may add that its value in this country would be greatly increased by translation; the frequent use of difficult technical terms often makes it slow reading.

S. R. K. GLANVILLE.

G. SOHBY: *Kitāb Qasḍ'idu l-Loḡhati l-Maṣriyati l-Qubṭiyya*, Cairo (Inst. Français) 1925, vol. 1, pp. 255.

This is a Coptic grammar in Arabic by one of the very small band of Coptic scholars which has arisen recently within the Egyptian Church. It is intended to provide a sound knowledge of the language in accordance with the methods of scientific philology as generally understood in the western world at the present time and to initiate the Copts into the results of recent research, the life-history of the language being treated in the light of its evolution from ancient Egyptian. The book is a valuable and useful contribution to Coptic studies as presenting in a collected form the work which has been done for some years past by Mallon, Stern, Steindorff, Spiegelberg, Sethe, Griffith, Murray, and Cram (*cf.* pp. 1-2), but its peculiar character as an effort to bring those studies to those who still use Coptic as their liturgical language and to raise up in the Coptic community a new generation of students equipped for the study of the history and literature of their Church inevitably calls forth a strong feeling of sympathy for Dr. Sobhy's undertaking, the fitting product of a life which, in spite of active professional duties, has been so largely consecrated to the loyal and filial task of securing the literary heritage of his own people.

The book is well printed and of convenient size. It deals with the Bohairic language, but constantly refers to the Sa'idic for comparison, as well as to the ancient language, a knowledge of the hieroglyphic characters being presupposed.

The treatment of the phonology (pp. 13 sqq.) is particularly interesting as indicating the pronunciation of Coptic in the services of the Church at the present day as compared with the transcription of proper names and the transliterations in the texts published by Casanova (*Bull. Inst.*, 1, 1-20) and by Gauthier (*Bull. Inst.*, v, 87-164) as well as the Wādī n-Natrūn which Dr. Sobhy has prepared for the forthcoming edition of *Wādī n-Natrūn* texts commenced by the late H. G. Evelyn White. *Cf.* SOHBY, *Pronunciation of Coptic in the Church of Egypt*, in *Journal* (1915), 15-19. Here we note that ϣ = Ⲅ or ⲅ where no doubt ⲅ is taken as having the modern Egyptian sound, though both ϣ and ⲅ are also given as equivalent to ⲅ (palatalised): the older transcription was ϣ = Ⲅ before a, o, u, and = ⲅ before e, i, as in ϣⲉⲡⲣⲓⲟⲥ = جرجس and ϣⲁⲡ = غار: ⲉ = ⲉ or ⲃ, not ⲉ, i.e. explosive not aspirate. ϣ = ⲉ or ⲃ and ⲃ = ⲃⲓ, this ⲃ sound for ϣ being common in mediaeval and in modern Greek. Ⲅ = ⲃ or ⲃ, ⲃ = ⲃ: ϣ = ⲃ or ⲃ, ⲃ = ⲃ, ⲃ = ⲃ or ⲃ. n is given its true sound as Persian or Turkish پ, a sound which does not occur in Arabic. The writer shows that Boh. ⲉ, Ⲅ, ϣ often = Sah. ϣ, n, ϣ, e.g. ⲉⲁⲓ-ⲣⲁⲓ, Ⲅⲁⲓ-ⲣⲁⲓ, ϣⲉ-ⲣⲉ, but it is not clear whether the modern Egyptian can distinguish between the aspirate and explosive, at least in the dentals. The change of ⲉ to ⲉ and of ⲃ to ⲃ is one of the characteristics of Egyptian Arabic, and the occasional and inconsistent use of ⲉ and ⲃ in mediaeval Egyptian manuscripts indicates that it is not a modern development. Probably, in reading Coptic, no difference is made between ⲉ and ϣ, save that the latter is often sounded d which ⲉ is not, and possibly none between n and Ⲅ.

Pages 35—204 give the accidence which is set out clearly and plainly. It might be even clearer if a general summary table of the tense formatives were given. These pages are illustrated by references to the historical evolution of the forms and in this perhaps it is the best and completest manual at present available and should be a work of reference for European students of Coptic who can command a working knowledge of Arabic.

Pages 205—232 deal with *نحو* which (partly) corresponds with what we generally call "syntax"; the arrangement of the sentence, the nominal and verbal sentences, and the connection of the parts of the sentence.

Pages 233—237 contain three passages from the prophets in Bohairic, Sa'idic, and Fayyumic (Akhmimic) set out in parallel columns. This is a most useful and interesting addition.

Pages 238—253 contain supplementary notes on the transmission of the consonant sounds of ancient Egyptian and their representation in Bohairic and Sa'idic.

The appearance of such a work suggests that in the present generation of Copts there are some who are turning to a serious and scientific study of their ancient language and this is indeed a most hopeful prospect.

DE LACY O'LEARY.

Psalterii Versio Memphitica e recognitione Pauli de Lagarde. Réédition avec le texte copte en caractères coptes par O. H. E. BURMESTER et E. DÉVAUD. Louvain, 1925.

Just fifty years have elapsed since the publication of the last critical edition of the Coptic Psalter in the Bohairic dialect. In 1875 Lagarde produced his *Psalterii Versio Memphitica*, which was immensely in advance of its predecessors and was based on a collation of six manuscripts. It had one great disadvantage in that it was printed in roman characters instead of Coptic type, which rendered it most troublesome and, to the Coptic scholar, irritating to read. Mr. Oswald Burmester and Prof. Eugène Dévaud of Fribourg have now prepared a new edition of Lagarde's work, printed in the excellent Coptic type of Louvain. And they propose to follow it up with new editions of the other extant books of the Bohairic Old Testament, if sufficient support is forthcoming. They have also in preparation a companion volume to the Psalter containing the variant readings of all the MSS. known, which now number fourteen.

In 1900 Swete in his *Introduction to the O.T. in Greek* pointed out the importance of the Coptic versions for the study of the LXX. and the necessity of accurate editions as the foundation; and it is much to be hoped that financial help will be found to enable this scheme of work on the text of the Bohairic O.T. to be completed. The first volume containing the text of the Psalter is ready and can be obtained on application to E. D., Case postale 64, Fribourg, Suisse. Price 15 fra. Swiss.

H. THOMPSON.

Scènes de la vie privée dans les tombeaux égyptiens de l'Ancien Empire. By PIERRE MONTET. Strasbourg, Librairie Istra. Oxford, University Press. 1925. 8vo. Price 100 francs.










In 1887—8 Maspero lectured at the Collège de France on the agricultural scenes of the Old Kingdom. He had already dealt with this theme in 1878 and collected his material into book-form, but the book never appeared. The lectures of 1887—8 were put into continuous form and published in 1888 in the first fascicule of the second volume of his *Études égyptiennes*. In 1919 Erman collected and published his notes, which he had accumulated over a period of many years, on the short legends, exclamations, songs, etc., which accompany many of the scenes in the Old Kingdom tombs¹. These two studies cover only part of the ground. Maspero's was confined to agricultural subjects, whilst Erman's dealt only with the speeches, and not with the pictures or their explanatory legends. Dr. Montet has now produced a work which embraces every aspect of these Old Kingdom scenes. He aims at interpreting and explaining the actions or processes depicted, the explanatory legends accompanying them, and the utterances of the persons as well. The works both of Maspero and of Erman appeared without illustrations. The present volume contains an illustration of almost every scene represented, in twenty-four good colotype plates and forty-eight text-figures.

For students who have to carry out their studies in spare time or in places far removed from the great museums and libraries (an ever-growing class), this volume is of a type which is of the greatest utility. We do not all of us possess, ready to hand, the ponderous tomes of Champollion, Rossellini, Lepsius, Mariette and others, and it is a great boon to find the best material conveniently collected from these scattered

¹ *Reden, Rufe und Lieder auf Gräberbildern des alten Reiches.* Abhandlungen of the Berlin Academy, 1919.

sources into a handy compass, and with a general accuracy which inspires confidence. Dr. Montet has availed himself of all the published material, but has supplemented this by a considerable use of his own copies and photographs.

In dealing with Old Kingdom texts the defects of our standard fount of hieroglyphic type are very apparent. This type was cut very largely from late models, when the signs had often undergone considerable modification. Dr. Montet has wisely discarded many of these inaccurate types and has had new ones made from Old Kingdom models to take their places. The frequent use of three different determinatives to express a collectivity made up of different elements¹ often reveals the limited resources of printed type. We now have several new mammals, birds and fishes, as well as other objects, to supply these deficiencies. Some of these new signs, however, are scarcely an improvement on the old: such is the hippopotamus on p. 16.

The book is well printed on good paper, and is conveniently arranged, but the text is not free from misprints. On p. 175, for instance, the determinative  is twice used instead of . On p. 223  is transcribed *hst*, and on p. 190 "absence" is mis-spelt. The sign  (generally used for ) owing to some defect in printing, looks like  almost wherever it occurs. I believe that the determinative of *mdt* (p. 281) should be  and not  as stated. The word *mdt*, as I shall show in a forthcoming article, is an anatomical term meaning "cheeks." The meaning of the expression  must be something like "blow out your (lit. his) cheeks, mate!" and it is appropriately called out to a man who is blowing the furnace down a tube with all his might.

The index is very complete and valuable.

WARREN R. DAWSON.

The Vaulted Tombs of Messara: an account of some early cemeteries of Southern Crete. By STÉPHANOS XANTHOUDIDES, Ph.D., Ephor-General of Antiquities in Crete. Translated by Prof. J. P. Droop, M.A., with a Preface by Sir Arthur Evans, F.R.S. Liverpool University Press, 1924.

Dr. Stéphanos Xanthoudides, who is not only Ephor-General of Antiquities in Crete, but is also Keeper of the Candia Museum, is, as Sir Arthur Evans says in his preface to this book, well known to all Minoan archaeologists as an honoured colleague. His work in the archaeological field has always been of the first class, and it is of especial interest to Egyptologists because it has largely been concerned with remains of the early ages of Cretan civilization and has resulted in the discovery of various apparently early connections with Egypt. The well-known Koumása figurines, published here by their discoverer on his Plate IV, were hailed at their first appearance as presenting an amazing similarity to predynastic Egyptian figurines (see *Journal*, I (1914), Pl. XVII, 1: cf. my *Aegean Archaeology*, Pl. XIV, 1, where, by Dr. Xanthoudides's kind permission, they were first published), although more recent research obliges us to put them considerably later in date than the latter. And now Dr. Xanthoudides presents the Egyptian archaeologist with further comparisons that go far towards stabilizing the theory of early Cretan connection with Egypt that was first adumbrated many years ago by Sir Arthur Evans, has since been so notably reinforced by his cogent arguments and those of the late Mr. Seager derived from the work at Mochlos, and now has to be accepted as a commonplace of archaeology. Sir Arthur Evans discusses the matter in his preface, and on pp. 128-130 of his volume Dr. Xanthoudides sums up the evidence on this point derived from his diggings, which is well worth the attention of Egyptologists. They would say, after studying this evidence, that during the predynastic and Old Kingdom periods, the comparisons point perhaps as much to Nilotic origin for some of the elements of early Minoan culture as to commercial connection, though connection must have been continuous from the predynastic age on. It seems to have been accentuated under the First—Third and Fifth—Sixth Dynasties. In the latter period the resemblances are remarkable, and we can already see (I would myself add) in Egypt the repercussion of the Aegean culture in the Egyptian button-seals and, a little later (under the Twelfth Dynasty), the adoption of the Aegean spiral to ornament Egyptian scarabs. And when we see the spiral returning to the Aegean with the characteristic Egyptian addition of the lily-flower at the spring of the volutes (*P.S.B.A.*, xxxi, 1909, 222), the full tide of influence and counter-influence on the arts between Egypt and Crete has set in. The point need not be laboured here. It is amply proved. Relations with the East, with Anatolia and Mesopotamia, are much less apparent.

¹ Cf. LACAT, *Rec. Trav.*, 35, 60.

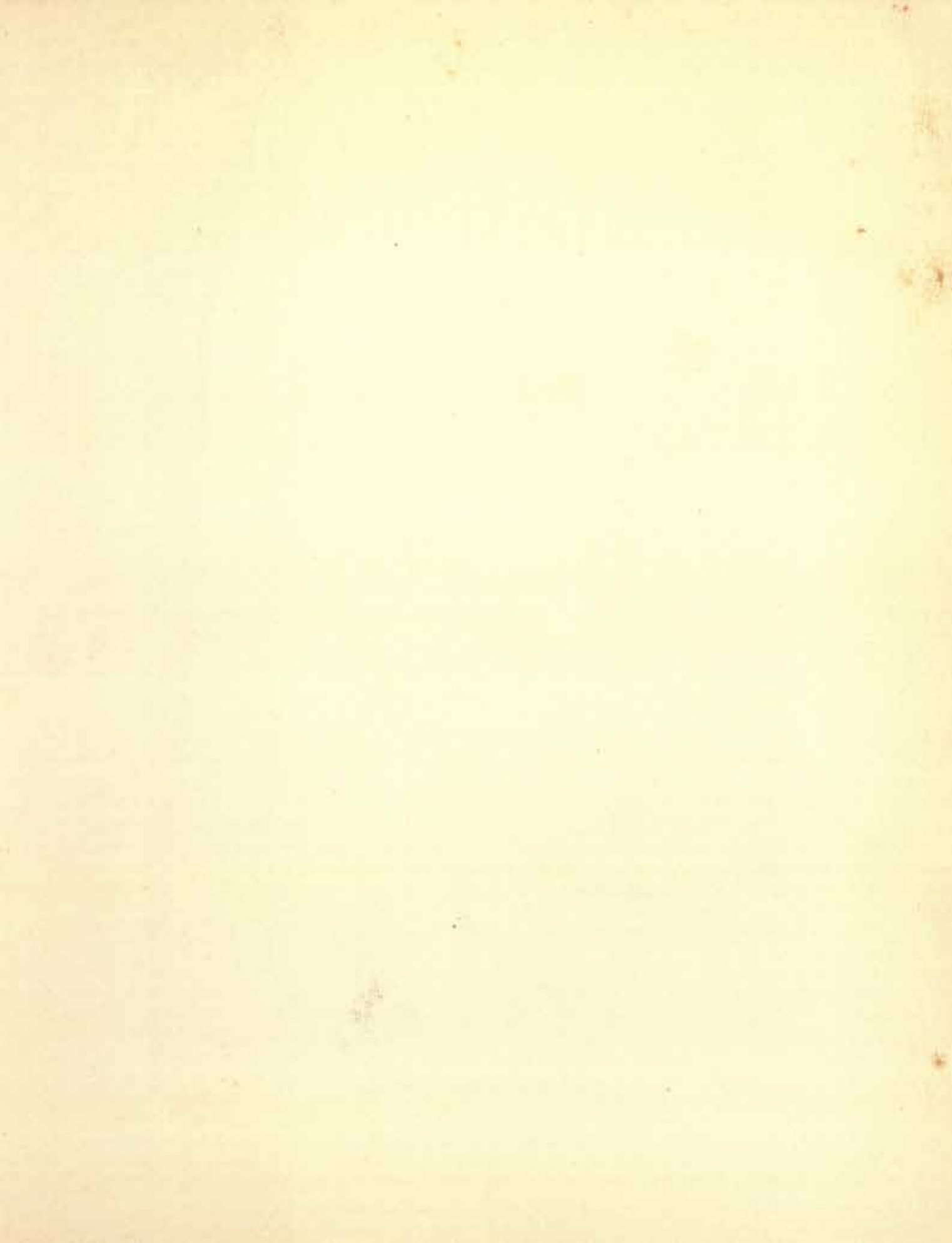
There is a seal-cylinder of about 2000 B.C. from Babylonia, and the Minoans no doubt derived much of their knowledge of seal-cutting ultimately from Babylonia; one can see Sumerian ideas in art-motives and methods here and there (as for instance in the carving of stone vases in relief: the Hagia Triada vases of L. M. I are descendants in Crete of the Babylonian carved vases of the Gudea period and earlier); but compared with that of Egypt, the Eastern influence was negligible.

Dr. Xanthoudides's discoveries were mostly made in the Messará, the central plain of Crete, and towards its western end where the plain slopes gradually down in the broad vale of the Mylepotamos to the bay of the southern sea that faces westward at Dikáli. This broad and fertile portion of Crete must always have been the seat of a large and settled population; we find it ruled by princes who erected palaces that rival Knossos at Phaistos and at Hagia Triada; we now see that it was possibly the oldest seat of the new-incoming culture-elements from Egypt which (probably later) penetrated to Knossos and to the north-east coast, as at Mochlos. There are several small harbours hereabouts that no doubt saw the first Nilotic landings, and served as the ports for Egypt in later days. Sir Arthur Evans has recently discovered traces of the ancient Minoan road that led hence to Knossos. Most of the finds were made in the stone *tholoi* or ossuary-tombs that are characteristic of the early period, and it is these tombs and their contents that are described by their discoverer in this volume. The idea of the *tholos* was no doubt derived from the cave in which the primitive neolithic Cretan deposited his dead. The early *tholoi* were simple enough, though often very large. Eventually they developed into the great stone tombs of the late Minoan period and the beehive *tholoi* of the mainland, the finest example of which is the "Treasury of Atreus" at Mycenae. The Greek *tholoi* then are the direct descendants of the cave-tombs, as the Mycenaean shaft-graves are of the pit-tombs, which continued to be a normal form of burial side by side with the *tholoi*, though the latter were more common in early days. The *tholoi* of the Messará mostly contain objects from the Third Early Minoan and First Middle Minoan periods (contemporaneous with the Sixth—Eleventh Dynasties), but many of them are probably older. It would seem that the skeletons of the older occupants (large numbers of persons were often buried in one *tholos*) were unceremoniously swept up and cleared away when necessary to make room for new additions, so that we have only the contents of the latest period of use, immediately before a change of custom made communal ossuaries of this type obsolete, and separate burial in clay coffins became general. No idea of mummification seems to have come from Egypt to Crete, and Cretan burial customs were always more varied and also more summary than those of Egypt. Not many perfect skulls were recovered, almost all dolichocephalic. Dr. Xanthoudides describes the usual early method of burial in the Messará in his last section, in which he seems to regard the *tholos* as the descendant rather of the prehistoric hut ("originally, that is, the Minoan's house in death had the same form as his house in life," p. 135). To me, however, as I have said above, an origin in attempted imitation of the walled-up cave seems more probable. The author sums up the Minoan culture of the early period in another section; and this final part of his book is very interesting, frankly more interesting than the first part, which is a mere catalogue (invaluable though it is) of the finds in the *tholoi* of Koumássa, Portí, Plátanos, Kalathianá and other sites.

There are sixty plates, which are a complete record of the finds, which have extended over a series of years, and necessarily have yielded great store of material. We see here the figurines and the stone paint-palettes which remind us so strongly of predynastic Egypt, the seal-stones that are so like the button-seals of the Old Kingdom, the scarabs that are so obviously directly imitated from those of the Twelfth Dynasty (one, Plate XIV, No. 1075, with a figure of Thueris in unmistakable Twelfth-Thirteenth Dynasty style, is in my opinion an actual importation from Egypt, not a Minoan imitation), the characteristic stone vases of the E. M. III period (of variegated breccia like those of Mochlos), and the polychrome pottery of the Middle Minoan age. Both are finely reproduced in colour on Plate XII, and Plates V and VI, respectively. We see too the primitive copper daggers and axes of the time: bronze does not appear till M. M. I (=Eleventh—Twelfth Dynasties), as was to be expected. There is simple gold and bead jewellery too, as at Mochlos. And there are views of the *tholoi*, though a ruined early *tholos* is a very difficult thing of which to make a photograph that shall be intelligible to those who have never seen one. But two modern cheese dairies of stone on Mount Ida, shewn on Plate LX, may serve to shew what an Early Minoan *tholos* probably looked like when complete: and there are plans of the *tholoi* at Koumássa, Portí, and Plátanos. A sketch map of the Messará shewing the position of the various sites is also provided.

Professor Droop has done his work as translator very well, but it would have been better if he had not added the few notes of his own in brackets that he has put in: it is best to let an author say only his own words.

H. R. HALL.





Funerary statuette from Abydos.

Scale c. $\frac{1}{15}$.

A MASTERPIECE OF EARLY MIDDLE KINGDOM SCULPTURE

By H. FRANKFORT

With Plate xxi

In a corner of the necropolis of Abydos not far from the cultivation and perhaps half a mile north of the Shûnet ez-Zebib, a corner where ancient robbers left only those tombs undisturbed which were not worth robbing, we had, during last season, the rare good fortune of finding the statuette shown in Pl. xxi. It was found in a shaft-tomb of the ordinary Middle Kingdom type. In the shaft there were remains of a disturbed burial: bones, some oval amethyst and a few round green-glazed beads and a hawk-pendant of green felspar, which sufficed by themselves to date the interment. Apparently the wife had been buried in the shaft after the husband had been laid to rest in the sepulchral chamber, and the tomb-robbers had looked no further after robbing the woman: at least the man's burial showed no signs of interference. The skeleton was complete, supine, extended, surrounded by the undisturbed remains of the stuccoed wooden coffin.

The only object found in the chamber is the statuette. The right arm was broken off; a chip from the left shoulder was only discovered when, with the promise of a substantial *bakshish* for the finder, the earth and bones from the chamber were turned over anew. At both sides the upper part of the seat is chipped, apparently by the same accident which damaged the arms.

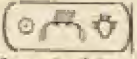
It is strange that such a valuable object should be found alone in a tomb. Objects of this class belong normally to people who can afford an extensive funerary equipment, and it is altogether unusual that a statuette of such quality should be uninscribed. But both these facts become clear if we consider that the burial was undisturbed, and that therefore the statuette must have been damaged before it was put in the tomb. Probably it was made for some rich and important person; but when the sculptor had almost completed his task (I find that the surface of the breast and of the lap is not quite finished off) and was going to hand it over to the sign-cutter, some unfortunate accident happened. The damage done was all the more serious if we remember that such statuettes had actually to perpetuate the material personality of the owner if the body decayed. Obviously the customer for whom the statuette was made would not accept it. To inscribe it was therefore useless, but sooner than throw it away the sculptor gave it, at a bargain-price no doubt, to the person in whose tomb we found it, who otherwise would not have been able to procure one at all.

So much for the surroundings in which the statuette was found; let us consider now its main features. The man is seated on a narrow seat with a slightly raised back, over which a woven cover hangs down. This is only schematically indicated by a projection on the back, exactly as in the statues of Sesostri I from Lisht. The massive block-seat itself is, of course, purely an art-convention, but not a primitive one. In the very archaic statuettes, at Leyden, Turin and Naples for instance, the details of the chairs are sculptured on their

sides, and that is also the case with both the Khasekhemui-statues from Hierakonpolis. But in the evolution between the Second and the Fourth Dynasty, in which Egyptian art definitely gains that peculiarity which opposes it as a whole, notwithstanding its long duration, to all others, in that short but momentous period of canonization and purification the block-seat was finally adopted, as best in keeping with the predominating tendency of that art to express only what is essential. Moreover the block-seat is of great plastic value, for it opposes the straight and flat forms of dead material to the finely modelled ever-changing planes of the human body which it supports.

That body is modelled, indeed, with the utmost sensitiveness; the face, the arms with the graceful wrists and the feet with the delicate toes and nails are exquisitely done. The back is as usual treated more summarily though the spine is indicated. The whole figure, with its rigid frontality and square compactness, possesses a monumental power which is astounding in view of its size, and is peculiar to the best Egyptian art.

The face is hardly a portrait; one feels that the expression of a particular personality is only latently present under a beautiful form which is ideal, general, typical. It has no relation in structure to the round Old Kingdom faces. It possesses quite outspokenly the broad but not fleshy face with the somewhat prominent nose of the Twelfth Dynasty, but it shares with the preceding period that look of childlike detachment and shows as mere possibilities only the amazing psychological differentiations of a time imbued with such literature as the "Dialogue of a man with his soul," differentiations which have found unrivalled expression in the later royal portraits of the period. In its simpler physiognomy our statuette is again related to the statues of Sesostris I, just as in the type of its seat and also in the position of the hands: the right hand holds the "handkerchief," the left lies extended on the knee, a position canonical in the Old Kingdom, but which seems to disappear in the latter part of the Twelfth Dynasty. Only the lower part of the body is covered with the long smooth garment, which hangs from the girdle down to the ankles.

Most extraordinary is the wig. This long wig with two groups of strands hanging down in front of the shoulders is essentially woman's wear: see, from the Old Kingdom, the statuette in the Carnarvon-Collection (*Journal*, iv, *Frontispiece*) or the alabaster figure of the British Museum (*Journal*, xi, Pl. i); but Queen Mutnefert the mother of Tuthmosis II still wears it (Cairo 572) and so do even Amenardys and her contemporaries. A few early instances, however, of men wearing this wig are known: one statuette from the Old Kingdom (Cairo 45), a wooden one of a certain Mentuhotp (Berlin 4650) and finally the famous wooden *ka*-statue of King Horus  from Daḥshūr. There is also one stela of a certain Amenī (Cairo 20562); and probably the use of this wig by men is no mere freak of fashion, for with few exceptions it is shown in the shabti figures down to the latest period. But a discussion of this matter would lead us too far from our subject.

Material: yellow limestone with markings of manganese. Dimensions: height 217 mm.; width of base 58 mm.; depth of base (the front is slightly convex) 124 mm.; depth of seat 64 mm.; height of seat, in front 87 mm., at back 101 mm.; projecting cover over back of seat, 33 mm. Now in the Ny Carlsberg Glyptothek, Copenhagen.

ALEXANDRIA AND CONSTANTINOPLE: A STUDY IN ECCLESIASTICAL DIPLOMACY

By NORMAN H. BAYNES

Scholars have often considered the diplomacy of the Pharaohs and of the Ptolemaic kings of Egypt; there is perhaps room for a brief study of the diplomacy of the uncrowned kings of Roman Egypt—the Christian patriarchs of Alexandria. This is the theme of the present paper¹. I am not here concerned with theology, but with the straggle of the

¹ This paper represents the substance of a lecture delivered at a meeting of the Society on January 26, 1926. I have retained its original form, and have accordingly refrained from any elaborate 'documentation.' The following are the principal modern works on which this paper is based:

PIERRE BATIFFOL: *La Paix Constantinienne*, ch. 2. Paris, Gabalda, 1914.

Id.: *Origine du règlement des conciles*, in *Études de liturgie et d'archéologie chrétienne*. Paris, Gabalda, 1919.

FELIX HAASE: *Altchristliche Kirchengeschichte nach orientalischen Quellen*. Leipzig, Harrassowitz, 1925.

HEINRICH GELZER: *Die Konzilien als Reichsparlamente*, in *Ausgewählte kleine Schriften*. Leipzig, Teubner, 1907, 142-155.

ED. SCHWARTZ: *Die Konzilien des 4 und 5 Jahrhunderts*, in *Historische Zeitschrift*, CIV (1910), 1-37.

Id.: *Konzilstudien = Schriften der Wissenschaftlichen Gesellschaft in Strassburg*, 20 Heft. Strassburg, Trübner, 1914.

P. ROHRBACH: *Die Patriarchen von Alexandrien*, in *Preussische Jahrbücher*, LXIX (1892).

On Greek monasticism:

KARL HOLL: *Über das griechische Mönchtum*, in *Preussische Jahrbücher*, XCIV (1896).

Id.: *Enthusiasmus und Bussgewalt beim griechischen Mönchtum*. Leipzig, Hinrichs, 1898.

J. LEIPOLDT: *Schenute von Atrips und die Entstehung des national-ägyptischen Christentums*. Leipzig, Hinrichs, 1903.

On Chrysostom and the Synod ad Quercum:

UBALDI in *Memorie of the Academy of Turin*: 2nd Series, LII (1903).

For Nestorius:

J. F. BETHUNE-BAKER: *Nestorius and his Teaching: a fresh examination of the evidence*. Cambridge University Press, 1908.

G. R. DRIVER AND LEONARD HODGSON: *Nestorius. The Bazaar of Heracleides*. Oxford, Clarendon Press, 1925. (My quotations from the *Bazaar of Heracleides* are taken from this translation of the work.)

F. NAU: *Le Livre d'Héraclide de Damas*. Paris, Letouzey et Ané, 1910.

Id.: *Nestorius d'après les Sources orientales*. Paris, Bloud et Cie, 1911.

ED. SCHWARTZ: *Zur Vorgeschichte des ephesinischen Konzils*, in *Historische Zeitschrift*, CXII (1914), 237-263.

Id.: *Die sogenannten Gegenanathetismen des Nestorius*, in *Sitzungsberichte d. Bay. Akad. d. Wiss. Philosoph.-philol. u. hist. Kl.*, Jahrgang 1922, 1 Abhandlung. München, 1922.

For Cyril:

PIERRE BATIFFOL: *Les présents de S. Cyrille à la cour de Constantinople*, in *Études de liturgie et d'archéologie chrétienne*. Paris, Gabalda, 1919, 154-179, and in *Bulletin d'ancienne littérature et d'archéologie chrétiennes*, I (1911), Fasc. 4.

For Dioscoros:

FELIX HAASE: *Patriarch Dioskur I nach monophysitischen Quellen*, in MAX SORALEK, *Kirchengeschichtliche Abhandlungen*, VI (1908). Breslau, Aderholz.

Bishop of Alexandria to maintain the supremacy of his see against the upstart bishopric of Constantinople. A word is, however, necessary by way of introduction on the development within the Eastern provinces of the Roman Empire of the organisation of the Christian Church as an institution.

Christianity took its rise in the cities of the Roman East. Paul passes from city to city founding his small Christian communities at strategic points which were to serve as bases from which the world was to be conquered for Christ. It was thus from the provincial capital that Christianity spread to the country-side: thus that in course of time the provincial capital came to be regarded as the mother church and the natural centre of the Christian communities scattered through the province. In this way from the first the Church unconsciously adopted for its organisation the same territorial divisions as those of the civil power: the communities in a civil province are regarded as collectively forming an ecclesiastical unit. While Paul writes his letters to the capital cities of Roman provinces—Ephesus (Asia), Corinth (Achaia), Thessalonica (Macedonia)—the first epistle of Peter is addressed to the congregations of Galatia, Pontus, Cappadocia, Asia and Bithynia (cf. 2 Cor. i, 1). The problem of organisation in the early Church has to many become a weariness owing to the preoccupation of students with dogmatic questions, such as the origins of the institution of episcopacy and the Apostolic Succession: but in itself the problem of organisation is only one aspect of the intensely human question of the maintenance of intercommunication between the several churches, and of the guardianship of the true faith through such intercommunication. When a travelling apostolate, when the web of a far-flung correspondence both proved inadequate, we hear during the latter half of the second century of the gathering of bishops in councils. And here again these extraordinary gatherings, assembled for the discussion of problems of pressing urgency, were gatherings of the bishops of a civil province within the capital of the province. About the middle of the third century from these extraordinary provincial councils there developed the regular provincial synods meeting annually in the provincial capital. Thus the prestige and authority of the bishop of the provincial metropolis were naturally increased: he tended to become the standing president of the synod: he won influence over the election of all bishops within the province. In 325 the Council of Nicaea determines that in future such provincial councils shall be held regularly twice in the year under the presidency of the metropolitan, and that no episcopal election shall be valid unless the metropolitan has given his approval. Thus in each imperial province by the side of the civil governor there stands the ecclesiastical head of the Christian communities within the province.

This is definitely raised to a principle of Church organisation, and, when the limits of an imperial province are altered, there follows a corresponding alteration of the sphere

And cf. A. WILLE: *Bischof Julian von Kios, der Nunzius Leo des Grossen in Konstantinopel*. Kempten, Kösel, 1910.

KARL GÜNTHER: *Theodoret von Cyrus und die Kämpfe in der orientalischen Kirche vom Tode Cyrills bis zur Einberufung des sogen. Räuber-Konils*. Programm. Aschaffenburg, Werbrun, 1913.

For the general setting cf. L. DUCHESNE: *Histoire ancienne de l'Église*, Tome III. Paris, Fontemoing, 1911.

This paper was written before I had seen

B. K. STEPHANIDES: *Οἱ πάπαι Κελεστίνος ὁ Α' καὶ Λέων ὁ Α' ἐν ταῖς σχέσεσιν αὐτῶν πρὸς τοὺς Βυζαντ. αὐτοκράτορας καὶ τὰς ἐκ' αὐτῶν συγκαλούμεναι οἰκον. συνόδους*, in *Ἐπετηρίς Ἑταιρείας Βυζαντινῶν Σπουδῶν*, ἔτος Α'. Athens, 1924, 55–85.

ED. SCHWABTZ: *Aus den Akten des Concils von Chalkedon*, in *Abhandlungen der Bayerischen Akad. d. Wiss. Philosoph.-philol. u. hist. Kl.*, xxxii Band, 2 Abhandlung. München, 1925.

of the metropolitan: the Emperor Valens will divide the civil province of Cappadocia in order to strike a blow at the authority of S. Basil. But the provincial councils develop into gatherings of bishops from *many* provinces, and these later councils tend in the same way to centre round the great cities of the Empire: Antioch, Alexandria, Ephesus; and as a result of this development the bishop of one of these great cities stands in relation to the provincial metropolitans in the same position as do the latter to the bishops within their several provinces—*i.e.*, there emerges the position of an over-metropolitan, or, as he came to be known, a patriarch. And these complexes of provinces with a patriarch at their head are identified with the larger divisions of a civil *præfecture*—the *dioceses* under their *vicarii*: just as the metropolitan has his parallel in the provincial governor, so the patriarch in the ecclesiastical sphere represents the *vicarius* of the praetorian *præfect* within the civil hierarchy. Just as the metropolitan must approve of the election of the provincial bishops, so the patriarch must give his consent to the elections of metropolitans within the civil diocese. This was the general rule, but the Patriarch of Alexandria exercised extraordinary powers, for *all* elections of bishops within the provinces of Egypt were subject to his approval. Thus had the Church in the Eastern provinces of the Empire adopted as the basis for the organisation of its hierarchy the territorial divisions of the Roman administrative system. From this principle there followed naturally the corollary that the importance and precedence of a bishopric depended upon the importance and precedence within the Empire of the bishop's city. Here again the result of an historical development was raised into a general principle. Byzantium—the humble Greek city—was, as a see, subject to the bishop of Heraclea: but when Byzantium was transformed into Constantinople and in 330 became the seat of the imperial government, this subjection of the capital of the Roman East to the unimportant bishopric of Heraclea was an anomaly: the see of Constantinople was coveted by metropolitans (*e.g.*, Eusebius of Nicomedia), even by patriarchs (*e.g.*, Eudoxius of Antioch); at length the Council of Constantinople (381) by its third canon declared that the bishop of Constantinople should stand second in honour only to the bishop of the old Rome upon the Tiber, *because the city of which he is bishop is New Rome*. Because Constantinople is the capital of the Roman East, it is given the place of honour amongst the Eastern churches: the suffragan becomes the first of the Patriarchs. This is indeed the crowning application of the theory of the Christian East which we have been considering: the rank of churches is determined by the prominence of cities as *civil* capitals—a principle itself deduced from the *facts* of an historical development. But the third canon of the Council of Constantinople was more than that: it was also a challenge to Alexandria. The occasion and the issue of that challenge form the subject of this lecture. But it is essential from the first to realise that this struggle between the Patriarchates is no chance encounter: that indeed it is the result of an historical development which links Paul of Tarsus to the Alexandrian patriarchs. For, if the rank of a bishop depended in principle on the rank of his city, to whom in truth did the pre-eminence belong—to the bishop of the city of Alexander with its six centuries of pagan and Christian history, or to the bishop of the city of Constantine, the city of yesterday, the presumptuous intruder amongst the capitals of the Roman East?

The early history of the spread of Christianity in Egypt is notoriously obscure, but in the last great persecution Egypt had withstood the utmost fury of the imperial agents, and that fury—described for us in the pages of Eusebius—and its failure had left their mark. Egypt had defied the might of Rome, and the Empire of Rome

had acknowledged defeat. That precedent, glorified in Coptic hagiography, became a treasured national possession. The Egyptian loved to be "agin the Government": it was a reassuring conviction that what Egypt had done once, Egypt could do again. We are dealing with the *city* of Alexandria: it is, however, easy to forget and essential to remember that though the opposition to the imperial government was led by Alexandria, though that Alexandrian leadership dazzles us by the great personalities in which it was incorporated, by the spectacular splendours of the vast stage on which the drama was enacted, yet behind the façade of Alexandria lay the Egyptian people. When the last great protagonist of Alexandria had suffered shipwreck at Chalcedon, there still remained the Egyptian people for whom a Monophysite faith stood as sign and symbol of their alienation from Rome and the Roman government: it was the massive resolution of the Egyptian people to remain loyal to that Monophysite faith that yet again defeated all the king's horses and all the king's men. It is perhaps the supreme example in human history of the triumph of non-cooperation. That is the background of the valley folk; there is further the background of the desert, no longer a solitary place, but peopled by anchorites and monks. If Christian asceticism in its origins had been in large measure a protest against a Church which was making too easy terms with the world, it was a patriarch of Alexandria, Athanasius, persecuted by the Church of the Emperor, who brought back to an alliance with the Church of Egypt the protestants of the wilderness. Monasticism in general—though to the generalisation there were many exceptions—was not interested in speculative theology: as Holl has reminded us, the monks were in the main concerned with practical questions of the defence of the forms adopted by Christian piety: so far as they were interested in dogmatic issues, it was in problems of soteriology, and it is, of course, a truism that soteriology from Athanasius onwards dominates the religious thought of Alexandria. The essential fact for Alexandrian piety was the Christ Who was the object of worship, rather than the Christ of logical and metaphysical definition, rather than the Christ Who, as the school of Antioch insisted, was also the man Jesus, and therefore conditioned by a human development in time and space. All conceptions which emphasised the dualism of nature in the God-Man tended to dissipate that unity of the person worshipped which was for the Egyptian a pre-requisite, if the analytic activity of the mind were to be stayed, and the heart freed for the untroubled repose of devotional contemplation. Thus, were the practical issues of cult or soteriology endangered, the monks were readily aroused to opposition, and they who were originally drawn for the most part from the people could, as propagandists, appeal with irresistible force to the people. In the fifth century the voice of the monk was what the press is to-day, and with their religious slogans the monks produced the same effect as modern newspapers with their political war cries. "Cursèd be Nestorins!" "Hang the Kaiser!" The slogan becomes an inebriant, and men are intoxicated with its passionate repetition: "But when they knew that he was a Jew, all with one voice about the space of two hours cried out 'Great is Diana of the Ephesians.'" As it had been in the pagan city, so it was in Christian Ephesus. The patriarchs of Alexandria played upon the emotions of these monks with inherited mastery: the reputation for orthodoxy which Athanasius had won attached itself to the office which Athanasius had held: when the relentless brutality of Theophilus, the foe of Chrysostom, had with fire and sword stamped out the opposition of the Nitrian monks, there was no further room for independence of thought in Egypt; no declaration of papal infallibility was needed: the infallibility of the Papa of Alexandria was for Egypt an axiom. The patriarch was fighting his country's battles, and his despotism was unchallenged. Hence-

forth the treaty of alliance which Athanasius had concluded between the desert and the city was maintained with a loyalty which had behind it the force of an inveterate habit. The monks of Egypt formed the Patriarch's fanatic bodyguard: theirs not to reason why: their clubs were brandished at his nod: their dervish bands would follow him to victory or destruction!

That is the setting: and Egypt's first champion in the duel between Alexandria and New Rome is Athanasius. It was Athanasius who realised the great advantage which distance gave to an Egyptian patriarch. The Bishop of Constantinople lived in the shadow of the imperial palace: but Alexandria lay more than three weeks' journey from the Eastern capital. Here it was much easier to play the essentially Egyptian game of passive resistance—the emperor meanwhile might change his mind! Athanasius, summoned to Caesarea by Constantine, simply stayed where he was—and waited. But passive resistance even in a patriarch had its limits, and that limit was reached when a strong emperor had once made up his mind upon a course of action and refused to change it. There is throughout the apparent vacillations of Constantine's church policy one fixed resolution which provides the key to the emperor's acts: the aim of that resolution was to secure the unity of the Church, and woe to him who opposed its realisation! Arius had withstood the imperial will at Nicaea and he had been exiled: why could Athanasius defy the command to appear at Caesarea and yet after piteous hesitation—as we now know from the papyri of which Mr. Bell has given us so masterly an edition¹—obeyed the command to present himself at Tyre? I believe the reason to be simple: as I have recently ventured to suggest in this *Journal*², the reason is that Arius had recanted, had signed an orthodox creed, and that Athanasius who refused to rejoice over the sinner that repenteth and would not admit Arius to communion was the one man who by his uncharitable bigotry barred the emperor from attaining his heart's desire. Therefore Athanasius was sent into exile in the West. That interview in Constantinople between emperor and patriarch is of profound significance for the course of the whole struggle: when a resolute emperor had once made up his mind, a patriarch of Alexandria could resist no longer: Alexandria won its triumphs against emperors who were irresolute or emperors who played into the hands of the enemy.

The sufferings and triumph of Athanasius raised Alexandria to a position of unchallenged supremacy. Constantinople under the Arian dominance of a Valens was not a serious rival. But when Valens fell on the stricken field of Adrianople, when Gratian's choice had given an orthodox emperor to the Roman East in Theodosius the Great, Alexandria immediately realised that this change might undermine the supremacy of Egypt. Gregory of Nazianzus had been summoned to Constantinople, and there began to re-form a congregation of those loyal to the faith of Nicaea. He had been recognised as bishop of the city by Peter, Patriarch of Alexandria: the latter now repented of this recognition and determined to impose upon the see of New Rome a Cynic philosopher who had been banished from Egypt. Bishops protected by sailors (from the Egyptian corn-ships?) hurriedly performed the rites of consecration under cover of night, and then Maximus together with his consecrators hastened to Salonica to secure the emperor's approval (380). This Theodosius bluntly refused, and the answer to Egyptian intervention was the third canon of the Council of Constantinople which we have previously considered. Gregory of Nazianzus relinquished his office, and Nectarius was consecrated bishop of Constantinople in his place. Alexandria had met an emperor who knew his own mind—and had suffered defeat.

¹ H. I. BELL, *Jews and Christians in Egypt*. London, 1924, 53 sqq.

² XI (1925), 58-69.

Theodosius the Great died in 395, and his sons Arcadius and Honorius were weaklings: Nectarius died in 397, and forthwith Alexandria renewed the struggle. Theophilus, the Egyptian patriarch, was a man of violence who knew no scruples, but he was also a consummate diplomat who knew how to bide his time. His first attempt to control the see of the capital was a failure: he proposed as candidate his personal friend Isidore, but the all-powerful minister, the eunuch Eutropius, with the support of Arcadius carried the election of Chrysostom. Theophilus protested against that election, but in vain. Eutropius threatened him with an accusation for deeds of violence committed in Alexandria: the patriarch's consent to Chrysostom's consecration was the price at which he could purchase immunity from prosecution: he considered it wiser to submit. Chrysostom thus began his ministry in the capital with the patriarch for his foe, but with the support of the emperor and of the empress Eudoxia.

I am not here concerned to describe how Chrysostom aroused the enmity alike of the court and of influential ecclesiastics in Constantinople—it is indeed strange that there is no worthy biography of Chrysostom: we await impatiently that monograph on which, it is understood, for more than a quarter of a century Baur, the profoundest student of Chrysostom's life since Haidacher's death, has been engaged. My purpose in this paper is simply to study the *methods* of Alexandrian diplomacy. In 399 Theophilus had quarrelled with his friend Isidore: the patriarch launched against the blameless octogenarian an odious charge: it was of course quite groundless, but the charge alone sufficed. Isidore was excommunicated, treated with brutal violence, and further accused of heresy. He fled for protection to the Nitrian monks. Massacre and arson scattered the survivors of the Nitrian community throughout the provinces of the Roman East. Some fled to Constantinople and appealed for protection and justice to Chrysostom. The bishop refused to act as judge upon the conduct of his colleague of Alexandria: his appeal to Theophilus for reconciliation remained unanswered: but Egyptian emissaries were despatched to Constantinople with counter-charges. The monks secured the support of the palace: their case was heard in the court of the praetorian praefect: their accusers were condemned to death, though stay of execution of the sentence was granted until the arrival of the Patriarch of Alexandria: Theophilus was summoned to stand his trial in Constantinople with Chrysostom for judge. The foes of Chrysostom within the capital saw their opportunity: they appealed to Theophilus "since," as Palladius, Chrysostom's biographer, writes, "he had experience in such matters." The first step was to discredit the orthodoxy of Chrysostom: then a large synod should assemble in Constantinople, and Chrysostom should be condemned as a heretic. Theophilus determined to secure Chrysostom's deposition and, if possible, his rival's death. He induced Epiphanius, bishop of Salamis in Cyprus, to believe that Chrysostom had favoured Origenism, and thus exploited for his own ends the fiery orthodoxy and pious simplicity of the revered champion of the creed of Nicaea. Epiphanius, in spite of his great age, made the journey to Constantinople as the enemy of Chrysostom: in the capital he learned that he had been but the cat's paw of Alexandrian diplomacy: in his bitter disillusionment he set sail for Cyprus, only to die on the voyage. The foes of Chrysostom were checkmated.

Meanwhile Theophilus, heir to the ecclesiastical stratagems of Athanasius, did not leave Egypt unaccompanied: a regiment of Egyptian bishops preceded him by the short sea route: he himself pursued his leisurely way through the provinces of Asia, encouraging those who were prepared to support Alexandria in the struggle with Constantinople—that

struggle is now a duel between the two patriarchates: the prize of victory supremacy in the Eastern Church. Theophilus no longer appeared as one who was called to meet a serious accusation: already he announced his intention of deposing a heretic bishop. At Chalcedon the foes of Chrysostom were gathered, and the emperor, who still supported the bishop of Constantinople, now called upon Chrysostom to cross to Asia and to examine the charges against Theophilus. This Chrysostom refused to do: he would give the Alexandrian patriarch no ground for his accusation that the bishop of the capital was interfering in matters beyond his jurisdiction. Here Uba'di in his valuable study of the Synod ad Quercum—a study which has unfortunately been disregarded by English scholars—has made an illuminating suggestion. Arcadius had summoned bishops to a council, the preparations were made, the bishops assembled, and now by Chrysostom's refusal to act as judge the emperor's plans were frustrate: he was like to appear ridiculous. How could he save his face? Theophilus provided the answer: the council could still meet: there was work for it to do. If Chrysostom would not be judge, if he disobeyed the imperial summons, he could *be judged*: the emperor would not have made his preparations in vain. The court turns against its bishop.

During the delay caused by Chrysostom's refusal Theophilus adduced his most cogent arguments. He had come, as Palladius says, like the beetle, laden with the dung of the East, laden with the gold of Egypt, with the salves and the odours of India. Two deacons deposed by Chrysostom—the one for adultery, the other for murder—drew up at the dictation of Theophilus the list of the charges against their bishop: a hasty reconciliation with the Nitrian monks removed the ground for further action against Theophilus: the council could begin its work. To the summons of the council Chrysostom replied that he was ready to appear before any synod in the world, if only his personal enemies would withdraw. In his absence Theophilus, the foe of the accused, his accuser and his judge, condemned him to deposition on the ground of his contumacious refusal to appear before the tribunal. The vacillation of emperor and empress might postpone the execution of that sentence, but not for long: the result was the complete triumph of the patriarch of Alexandria, and Chrysostom's successors in the see of Constantinople took the lesson to heart and were careful not to antagonise the uncrowned king of Egypt. Cyril succeeded his nephew Theophilus on the throne of S. Mark and continued the policy of the dynasty.

In 428 Theodosius II chose the eloquent monk Nestorius to be bishop of Constantinople. An honest, fearless and devout man was head of the Church in the Eastern capital. Cyril saw that here he could count upon no subservient submission, and took his measures accordingly. The tragedy of Chrysostom was to be repeated in the "Tragedy of Nestorius"—the title which Irenaeus gave to the great collection of "*pièces justificatives*" which he compiled in his friend's defence. This new triumph of Alexandria was won by methods which were now traditional with the see of S. Mark. Naturally I shall not attempt here to sketch in detail the *Vorgeschichte* of the Council of Ephesus: I am only anxious to demonstrate that parallelism in the methods of Alexandrian diplomacy. As with Theophilus, so with Cyril: his unscrupulous violence had laid him open to accusations which it would be inconvenient for him to meet: diplomacy demanded that he should be able to pose, in like manner as Theophilus had done, as the defender of threatened orthodoxy. As in the case of Theophilus, however, it was the patriarch and not the bishop of Constantinople who began the attack. The first step of Theophilus had been to secure from an Egyptian synod the condemnation of Origenism in order to charge Chrysostom with that heresy: the

first step of Cyril was to attack Nestorius in his Easter pastoral of 429 and in a circular letter to the Egyptian monks: in both he carefully avoided any mention of the *name* of Nestorius. Copies of these documents reached Constantinople: here there were priests from Alexandria who were ready to provide Nestorius with material for an accusation before a council. That Cyril knew his danger is clear from his protestations contained in his first letter to Nestorius: "let not your Piety doubt for a moment that we are ready to suffer anything even to prison and death": at the same time Cyril wrote to his own agents in Constantinople giving them their instructions: they were to paint Cyril to his Egyptian opponents as the heroic champion of the true faith, while no direct attack was to be lodged against Nestorius with the emperor, lest Nestorius should be able to complain that Cyril was accusing him to Theodosius of heresy¹. Cyril's correspondence indeed proves that this parallelism in method was conscious. To his agents in the Eastern capital he would admit no anxiety. "There is no need for alarm: councils sometimes, every one knows, turn out otherwise than men expect [an obvious allusion to the Synod ad Quercum]. Let not Nestorius, poor man, think that I shall submit to be judged by him, whatever accusers he may suborn against me. The rôles will be reversed: I shall decline his competence to judge me, and I shall know how to force him to defend himself." (Ep. 4.) The letters of Cyril to Nestorius were carefully framed so as to draw statements from the bishop which could be used as evidence against him. They produced the effect which Cyril desired. He could now appeal to Rome; Pope Coelestine should be used as Theophilus had sought to use Epiphanius. Cyril sent to the Pope a lying summary of the course of the controversy: the true chronology was distorted in order to disguise the fact that Cyril had himself been the aggressor. Nestorius, conscious of his honesty and orthodoxy, also sent a report to Rome, but in Greek: this Coelestine was unable to read, while Cyril with subtle diplomacy had caused all his evidence to be translated into Latin. The Pope, who probably hardly realised what the dispute was about—the term "Mother of God" was not in common use in the West at this time—now declared against Nestorius: Nestorius must within ten days of the receipt of the Pope's letter accept the theology of Rome and Alexandria and disavow his (unspecified) heretical views. Cyril was constituted the Pope's mouthpiece and representative. It was more than even Cyril himself could have hoped for. He could now with even greater success than Theophilus pose as the champion of orthodoxy. He compiled his famous "Anathemas," and exceeding any authority which he could rightly claim demanded that Nestorius should subscribe to them. "Rechtlich betrachtet war dieser dogmatische Erlass des alexandrinischen Patriarchen eine Ungeheuerlichkeit"—a legal monstrosity. Schwartz has pointed out² that in the correspondence between Cyril and the Pope the emperor is never named—so little notice did men take of Theodosius II. Yet even before the Egyptian bishops bearing Cyril's Anathemas had arrived in the Eastern capital the emperor had by a constitution addressed to the bishops summoned a council to meet in the following year at Ephesus, while in an ungracious letter to Cyril he showed that the council would enquire into the conduct of the Patriarch of Egypt (19 Nov. 430). The council met: of the terrorism practised at Ephesus by Cyril's rabble I need not speak: Nestorius had to be guarded by imperial soldiers from assassination, and could not leave his house³. The refusal of Cyril to await the arrival of John of Antioch and the Syrian clergy is well known: his complete disregard of the emperor's instructions, his defiance of the

¹ This letter is quoted by Nestorius. *Bazaar of Heracleides*, 101.

² *Historische Zeitschrift*, CXII (1914), 257.

³ Cf. *Bazaar of Heracleides*, 108, 134–135.

emperor's representative are equally familiar. Cyril *was* in fact the Council. As Nestorius says, Cyril conferred upon himself the office of judge (p. 117). "I was summoned by Cyril who had assembled the Council, even by Cyril who was the chief thereof. Who was judge? Cyril. And who was the accuser? Cyril. Who was bishop of Rome? Cyril. Cyril was everything." Before such a tribunal Nestorius could obviously not appear. Its deliberations were a foregone conclusion and the deposition of Nestorius inevitable.

It was in vain that the distracted emperor confined Cyril: Egyptian gold procured the prisoner's release, and once in Alexandria Cyril was safe. Once in Alexandria his hands were free, and he fought the cause of his Anathemas with the "benedictions"—the *εὐλογίαι*—of Egypt. Details of those *εὐλογίαι* chance has preserved to us in a document which has recently been published for the first time by the great Roman Catholic scholar Pierre Batiffol¹. Theophilus had come to Constantinople, as we have seen, laden with the dung of Egypt: from Egypt Cyril distributed to those who had influence at the Byzantine court amongst other gifts eastern carpets, ivory chairs and tables, fine linen, ostrich eggs and a sum in hard cash which Batiffol in 1911 calculated at over a million francs. The benedictions of Alexandria proved persuasive: though Cyril was forced to approve of an Antiochene creed, he was not constrained to sacrifice his Anathemas.

The parallelism in method between the Alexandrian attack upon Chrysostom and the attack upon Nestorius is striking. Was it even more complete² than has been thought? Schwartz has remarked that the summoning of the Council of Ephesus by the emperor was premature, since Theodosius had no considered policy for which negotiation might prepare the way before the assembling of the Council: Schwartz therefore concludes that it must have been the advice of Nestorius which led the emperor to his hasty decision³. The nature of this difficulty, first raised, I think, by Schwartz, needs perhaps a word of explanation.

Gelzer and Batiffol have shown that the Church councils of the Christian empire represent the imperial senate so far as *res divinae* are concerned. The senate of pagan Rome had discussed both civil and religious matters, and the *res divinae* as the more important came first upon the agenda. Since the victory of Christianity there only remained for the senate the consideration of profane matters; the Church council, formed on the model of the Roman senate, becomes the supreme authority in *rebus divinis*. The emperor nominates and summons the senators: it is he who determines the composition of Church councils: he bears the expense of the bishops' journeyings, and puts the imperial post at their service. The presidency belongs to the emperor or his delegates: Constantine, I believe, presided in person at the Council of Nicaea: later emperors preferred to send their representatives. In the senate the presiding magistrate does not vote: neither do the imperial delegates in the council. The Gospels take the place of the Altar of Victory. The *senatus consulta* need for their validity the approval of the emperor: without imperial sanction the conclusions of Church councils are of no effect. Gelzer entitled his famous essay *Die Konzilien als Reichsparlamente*: but Church councils are, as Schwartz has reminded us, Imperial Parliaments of a peculiar kind: their members are not the representatives of their congregations or their dioceses: the old conception dating from the days before the triumph of the Church lives on: the councils of the Church are charismatic assemblies: their decisions are revelations of the Holy Ghost—of that Holy Spirit that

¹ Cf. the bibliography on p. 145 *supra*.

² *Historische Zeitschrift*, cxii (1914), 258 sqq.

lives in the bishops through the consecration to their divinely appointed office. There can therefore be no question of a majority or a minority: the decisions must perforce be unanimous: a minority, if it persists in opposition, necessarily creates a schism: the only course open to it is to deny to the council with which it disagrees the operation of the Holy Ghost—to form, as at Sardica or Ephesus, another council through which the Holy Spirit may express the divine will. Of necessity therefore a far-seeing emperor, seeking, as seek he must, the unity of the Church, is bound to prepare by previous negotiation a solution in which this charismatic Parliament will concur: for, if there is no concurrence, the whole is lost, and imperial policy is foredoomed. Constantine in the *Homoousion* had his solution: what in the mind of Theodosius was to be the principal task of the council when he summoned the bishops to Ephesus? Here I would like to make a suggestion, based upon an obscure phrase in the *Bazaar of Heracleides* which does not seem to have attracted the notice of students.

Addressing Cyril, Nestorius writes (p. 105) "Thou hast stirred up [my friends against me] in order that under pretext of their souls thou mightest show thyself zealous to set them aright, because thou hadst pleasure in them, or that either I might desist from listening to thine accusers and those who were ready to accuse thee, who were already armed against thee, since, if that were to come about, it would then be easy for thee to do whatsoever thou wouldst in regard to the possessions, or otherwise in oppressing me thou wouldst make believe that for the sake of the fear of God I was thine enemy and that *for this cause I had declined mine office as judge*." By oppressing Nestorius, Cyril would create the impression that it was because of the consciousness of his own guilt that Nestorius had declined his office as judge. I would boldly suggest that in this extremely clumsy sentence we possess the key to that premature summons of the council by Theodosius. Arcadius had summoned the Synod ad Quercum to try Theophilus: Chrysostom's refusal to act as judge had disconcerted the emperor's policy. I believe that the Council of Ephesus was called by Theodosius primarily to make inquisition into the conduct of Cyril: that suggestion is indeed borne out by the terms of the emperor's letter to the patriarch: the refusal of Nestorius to act as judge similarly frustrated the policy of Theodosius.

In each case the emperor cuts a sorry figure: and in each case, before the emperor can make up his mind to sacrifice his bishop, it is left to another to shoulder the burden of responsibility. You recall the scene in Chrysostom's case: the bishops who had led the opposition to Chrysostom were determined to force a decision: "in our view," they said to Arcadius, "you, Sire, are appointed by God as absolute ruler, subject to none, superior to all: your will is law. Do not desire to be more lenient than the priests, more holy than the bishops. We have publicly declared before all: on our heads fall the deposition of John. Do not then spare one man to bring us all to ruin." Arcadius hesitated yet a few days longer, and then the imperial order was issued: a notary was despatched to Chrysostom with the message: "Acacius, Antiochus, Severianus and Cyrinus have taken your condemnation upon their own heads. Commend therefore your affairs to God, and leave the Church." From this scene turn to the amazingly vivid account which Nestorius has given of the interview of the archimandrite Dalmatius with Theodosius II (*Bazaar of Heracleides*, pp. 272 ff.). The emperor had just said "Neither do I find any cause of blame in this man [*i.e.*, Nestorius]; I and my empire and my race are guiltless of this impiety" (p. 277), when "Dalmatius and those with him cried out: 'On me let this impiety be, O Emperor; I rebuke thee and thine on account of these things. I will make my defence for these things before the

tribunal of Christ, as having done this very deed.'.....And after [the emperor] [had] received this promise that the responsibility for the impious deeds committed against me should not be [his], he decreed and confirmed the things which had been wrought against me."

Compare these two conversations with the interview between Constantine and Athanasius with which our account began, and you have before you the reason for the success of the diplomacy of Alexandria.

Cyril died (444), and the East heaved a sigh of relief: a letter attributed to Theodoret advises that a heavy stone be put on his grave, lest he should return. The dead would soon have enough of him and try to send him back. The "dynasty" had come to an end, but Dioscoros continued Cyril's policy. The diplomacy of Dioscoros, however, has not the subtlety of a Theophilus or a Cyril: subtlety indeed was unnecessary, for the emperor was now under the control of the eunuch Chrysaphius, and Chrysaphius was a partisan of Dioscoros. Supported by Chrysaphius, and thus secure of imperial favour, the Patriarch of Alexandria could snap his fingers alike at Pope and Western emperor. Pope Coelestine had delegated his authority to Cyril, but Pope Leo the Great would delegate his authority to none. Leo's first letter to Dioscoros on the latter's accession gave to the patriarch his cue. Alexandria, the Pope had said, must be one with Rome. To that demand Dioscoros opposed the determination that Rome should find in the East her match—that the East, too, should have her Pope. That is the meaning of the Second Council of Ephesus: it is this which distinguishes the battle fought by Cyril from the battle fought by Dioscoros. Cyril could exploit a pope against an emperor: Dioscoros played a yet more daring game. He held the emperor a eunuch's slave, and hurled his defiance against the see of Peter. The Patriarch's Coptic biographer expresses the whole situation in a nutshell in his doubt whether Mark were not greater than Peter.

Of the "Brigandage of Ephesus"—the *Latrocinium* of 449—it is unnecessary to speak: an analysis of Alexandrian methods would add little of value to the picture already drawn. Here Alexandrian violence overreached itself: Dioscoros—the Attila of the Eastern Church, as Amelli¹ has styled him (though this is surely an insult to Attila!)—would not even permit the reading of the Papal letters: it was amid scenes of indescribable confusion that Eutyches was reinstated and Flavian, the Bishop of Constantinople, deposed.

But with the fall of Chrysaphius and the accession of Marcian and Pulcheria the tables were turned. Pope and emperor were united, and at Chalcedon the whole structure of Alexandrian supremacy fell like a house of cards. When Marcian's first letter reinstating Ibas and Theodoret, deposed by the *Latrocinium*, reached Alexandria, the clergy of Egypt foresaw their doom: "Death is in this letter, Man of God." The words, reported by the Coptic biographer of Dioscoros, express that conviction. Pulcheria, "the second Eve," had seduced her husband to Egypt's ruin, and the summoning of the Council of Chalcedon in spite of the dissuasion of Leo the Great was the work of the empress. But in the shipwreck of Alexandrian domination the captain never left the bridge: Dioscoros amidst the miserable recantations of the Eastern episcopate never wavered: he could have bought his throne by submission—I accept Haase's defence² of the historicity of the Coptic biography of the Patriarch with its account of the interview between the emperor and Dioscoros before the meeting of the council—but for the successor of Athanasius, of Theophilus and

¹ *S. Leone magno e l' Oriente*. Roma, 1882. I owe the reference to Haase.

² In his monograph on Dioscoros: cf. the bibliography on p. 145 *supra*.

Cyril the price was too high. Dioscoros would humble himself neither before Pope nor Emperor. "With me the faith of the fathers is destroyed." These words of Dioscoros as he left the council—he refused to appear at the later sittings—were his challenge, addressed not to the bishops who had deserted him, but to the people of Egypt. The Council of Chalcedon came not to bring peace, but a sword, and the answer of his people to their Patriarch's challenge was the formation of the Egyptian monophysite church. The faith of Cyril, as Egypt understood it, was not destroyed. But for the Patriarchate of Alexandria there was to be no recovery. "God has deposed Dioscoros!" shouted the bishops gathered at Chalcedon. "This Dioscoros," said Bishop Leontios of Askalon, "has become a stumbling block to the whole assembly of the bishops, for it is his will that for his sake all should go into banishment. This 'Saint' contends that he is fighting for the true faith and yet he values his own person higher than God, higher than [Rome, Constantinople and Antioch] and higher than all bishops. Even were Alexandria destroyed, should Dioscoros perish with Alexandria, yet for all that the world would not remain without a bishop." At Chalcedon the Patriarchate of Alexandria, as the world had known it, was indeed destroyed. The melancholy history of the successors of Dioscoros has recently been recounted in Jean Maspero's posthumous work¹. Yet Leontios spoke truly: the Christian East did not remain without a bishop; for the victor at Chalcedon was the patriarch of Constantinople. Henceforth Constantinople is not merely the civil capital of the Eastern Empire: the God-founded city of Constantine is also the undisputed centre of the Church of the East Roman world.

If the figure of the deserted Dioscoros departing for his distant exile in Gangra extorts our reluctant homage, our hearts go out towards a greater exile, Nestorius. In Egypt Nestorius read the Tome of Pope Leo the Great and rejoiced; in his apology he wrote: "My dearest wish is that God should be blessed in heaven and on earth; as for Nestorius let him remain Anathema: God grant that while men curse me, they may be reconciled with Him."

¹ *Histoire des Patriarches d'Alexandrie depuis la mort de l'empereur Anastase jusqu'à la Réconciliation des Églises jacobites* (518-616). Paris, Champion, 1923.

PRELIMINARY REPORT OF THE EXPEDITION TO ABYDOS 1925-6¹

By H. FRANKFORT

With Plates xxii-xxxi

Our expedition went out to accomplish a threefold task: we were to complete the investigation of the "Osireion," we were to see whether the necropolis was still able to yield objects of interest after all the excavation carried out there and after innumerable years of robbers' activity, and finally we were to start a work the magnitude of which equals its scientific importance, the complete photographic survey of the Abydos temples. But I propose to confine myself at present to a discussion of the first mentioned item, for the work in the necropolis, which was more successful than we had dared to hope, will presumably be published in the next number of this *Journal* (Pl. xxi shows one of our best finds). The photographic survey is by no means finished, and will occupy us fully in the coming season.

We arrived in Egypt at the beginning of November² and after having fetched furniture and light railway from Tell el-Amarnah, we settled down in the Government House at Abydos, which was kindly lent to us, while our own house, after ten years of disuse, was freed from a certain number of uninvited guests and repaired as far as was necessary. While we awaited the arrival of the tackle and timber which the Department of Antiquities had most courteously put at our disposal for the "Osireion" work, Mr. Felton started to experiment for the temple-survey and I pondered, on the spot at last, over the extraordinary building the problem of which we had to solve. *The* problem—there were at least three: on the date there were mere guesses and on the builder not even these; the architecture, as such, was by no means clear; and the purpose of the whole structure was a complete mystery³.

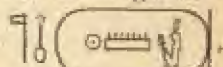
While thus strolling about we solved the first problem. One is struck by the occurrence of peculiarly shaped holes in some exposed wall-blocks of the "Osireion," which show that here, as in the adjoining Seti-temple, the blocks were held together by dovetails. As the

¹ In publishing this preliminary report I comply with the wish of the Editor, who desires to put as soon as possible the results of the past expedition before those whose support enabled us to carry through. The report, with very few additions, follows the text of a lecture which I delivered soon after my return from Egypt, during the exhibition of our finds in the Society of Antiquaries' rooms at Burlington House. The final statement of facts and the full evidence for the interpretation of the "Osireion" here put forward will, it is hoped, appear within one or two years in the memoir on The Cenotaph of Seti I at Abydos.

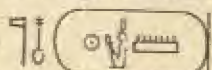
² The staff of the expedition consisted of Mr. H. Frankfort, Director, Mr. Herbert Felton, photographer and engineer, Mrs. Frankfort, who directed the camp-household, recorded in the necropolis, and copied texts in the Osireion, M. B. Van de Walle, sent out by the Fondation égyptologique Reine Élisabeth, who copied texts throughout the season, Mr. T. J. Colin Baly, who assisted in recording and mapping. Mrs. Felton also joined her husband in the latter part of the season and assisted him in the photographic work. Moreover, Dr. Hall stayed with us from December 6th to 21st.

³ See *Journal*, I, 159 ff. where Prof. Naville gives an account of the matter as it stood after the completion of his second season's work. The war prevented him from continuing in the following year as was his intention.

Egyptians used little cement—this in fact seems only to have served as a lubricant to facilitate the sliding into position of the blocks—some particular device was needed to strengthen the walls. The dovetails which connect the blocks of the temple-walls bear the cartouche of the builder. Would that also be the case with those of the "Osireion"? And, first of all, could we get at them? We looked wherever the walls were damaged; and on the top of the large entrance through which one passes from the transverse room into the Central Hall, we found a dovetail in position in its hole. It was of black granite.

I had it lifted and on its lower surface it was inscribed with black ink: .

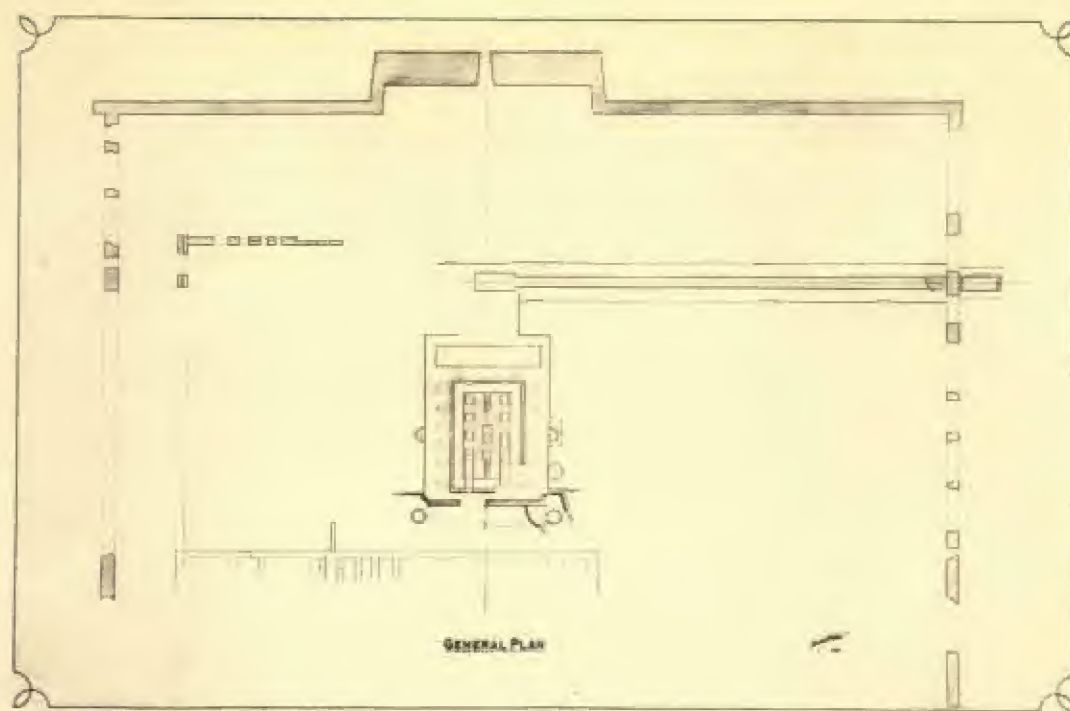
Mn-mʿt-Rʿ, the prenomen of Seti I (Pl. xxv, 3). The big surfaces of the signs were chiselled out more or less, but the work was obviously not completed. Seti I the builder of the "Osireion"—the evidence was strong, but not entirely conclusive. For our dovetail sat quite high up in the wall; the adjoining rooms were inscribed by Merneptah; it was just possible that Seti had carried out restorations there as well and that his inscription was put, on that occasion, on such dovetails as he could reach. I consequently looked for confirmation of our find and noticed another dovetail, which could just be seen where in the backing wall one of the blocks had accidentally flaked off (Pl. xxvii, 4). It was in the third course from the top, where the granite roofing slabs were still in position, and where the granite architrave was worked into the fabric of the quartzite-sandstone backing wall, a spot where the building is so well preserved that there can have been no tampering with the dovetails. We erected a scaffolding, chiselled away about half an inch of the broken

surface, and could both see and feel a deeply cut cartouche . So no doubt remained. The hidden stones had at last revealed the founder.

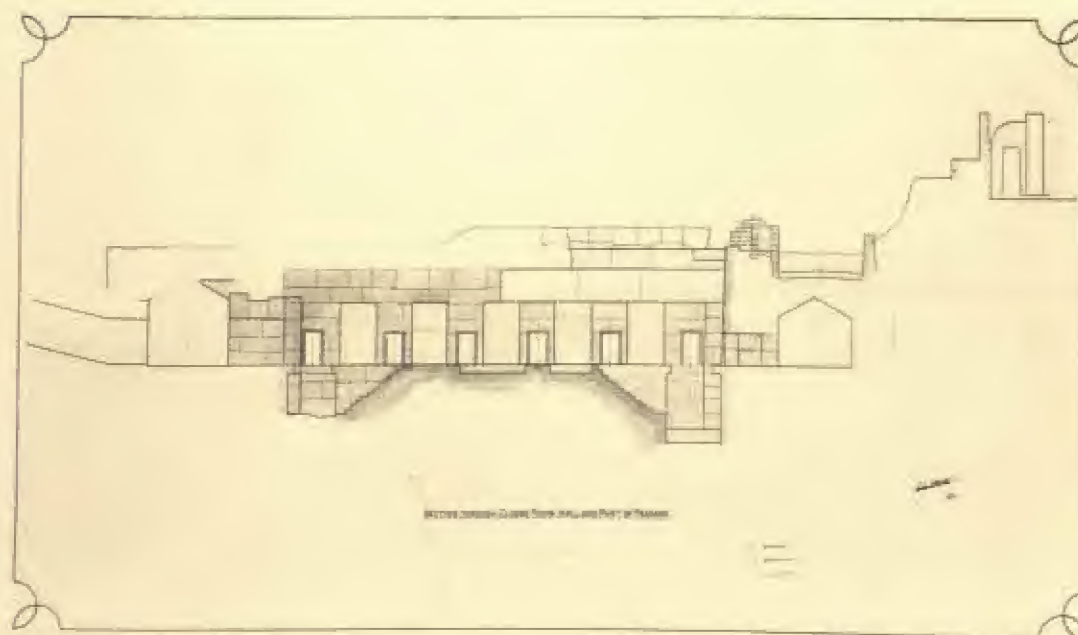
But if Seti I built the "Osireion" as well as the temple, our next problem ought to be to clear up the relation between these two buildings. We had satisfied ourselves that no actual connection exists. The hole broken in the northern corner of the inner-room was obviously made by would-be treasure-hunters. It had been started from the inside, for there were the lines which were cut in to define where the opening had to be made, and it just passed through the thickness of the wall and the limestone mantle of the building into the sand. But there might be a merely architectural connection between the two contemporary structures. So I cut a trench in the main axis between the two buildings, and there it appeared (Pl. xxii, 2) that the front- and back-wall of the chamber were prolonged upwards beyond the roof and acted as retaining walls for the sand-bed on which the temple was built.

This work on the top and round the building led to another discovery: we found a roughly semicircular wall built against the outside of the "Osireion." It had not much strength and consisted of rough small lumps of limestone; but within its enclosure there was very compact black earth, a strange feature, seeing that the building lies well out in the desert, surrounded by sand and marl. We therefore excavated the pit (Pl. xxiii, 2) and had actually to go down for more than 50 feet through this compact mass of black earth, which contained nothing but two diminutive fragments of Nineteenth Dynasty pottery; then we reached water and could not go any deeper, but the wall continued. Eventually we found six of these pits, round the end of the building (Pl. xxii, 1)¹. Their meaning remained a point of much discussion, but after a renewed inspection of the tree-pits, which

¹ Only five are shown in the plan.



1



2

1. Plan of Cenotaph of Seti I with the temenos-wall of his temple. Local north lies to the right.

Scale 1 : 2000.

2. Section of the Cenotaph on the vertical line shown in the Plan, fig. 1. On the right is the back of Seti's temple.

Scale 1 : 550.





1. Western side of canal (on the left, the island with the stairs; on the right, broken ledge in front of backing-wall).



2. Tree-pit against outer wall of the Cenotaph (looking towards the local east).



1



2



3



4

Clearance of Central Hall.



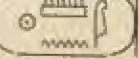





1. Beginning of clearance work.
2. Pulling out a block on rollers.
3. Levering up a block in order to insert rollers underneath.
4. The last and largest blocks.

Mr. Winlock found at Dêr el-Bahri, I felt sure that our pits served the same purpose; this alone can explain the presence of the black earth, which of course must have been specially brought up from the cultivation. So I excavated the southernmost pit where the top layers were best preserved, with meticulous care, and though here as everywhere in Abydos the white ants have destroyed most remains of wood I succeeded in finding a few small fragments, which, analysed by Professor Newberry, turn out to be of coniferous wood, with one fragment of the tamarisk. I will not discuss here all the conclusions which one might draw from this discovery, but only recall the funerary function of the coniferous trees and the tamarisk, and also the fact that tombs were supposed to be surrounded by trees, a point to which we shall have to refer later on.

Another observation made in connection with the pits, and confirming those of the former expedition, proved that the building was entirely covered over with earth. From every course of the limestone mantle which surrounds the building, streaks of white chips run off into the surrounding soil (Pl. xxiii, 2); they are not found within the pits. Obviously they are derived from the chipping of the blocks when they were fitted into the wall, and they show that each course was brought in position after the surrounding of the building had been filled up to the height of the preceding course. The pits however, built up at the same time and actually leaning against the outside of the building, were kept open to receive the black earth for their trees and they therefore do not show the alternating layers of thrown-in soil and chips. The ground which was thrown in is actually the broken up marl of which the desert at Abydos consists underneath its sandy surface. In this marl the colossal cutting was made in which the building was to be put and which was filled in, as we have just seen, while the work proceeded. It is important that the broken marl also covers the roofing slabs. The whole building was—or was meant to be—subterranean.

While this work went on we had also started the clearance of the Central Hall, which was entirely encumbered by enormous fragments of fallen roofing-blocks¹. We wanted it clear to understand its architectural features and also because we had to install our plant there for the investigation of the canal which surrounds the Island. But it was of course impossible to lift the blocks, which weighed anything between one and fifty tons, right out of the building and I have therefore used the transverse room to pile them up in, as it is not of any importance. Mr. Felton proved as ingenious as Heath Robinson in devising schemes for the extraordinary task, and with levers, rollers and man-power, and with the small railway, the work proceeded at a good rate (Pl. xxiv). In clearing we were able to establish the identity of those who wrecked the building. On one of the stones the row of jumping-holes, meant to take the dry wooden wedges, which, when wetted, would by their expansion make the granite crack (see Pls. xxx, xxxi), was only outlined in red and not yet cut. And in the same red it showed the Coptic cross. We also found one stone which with its length of almost 20 feet could only have been one of the beams which, resting on the projecting parts of the roofing slabs of the side-aisles (see Pl. xxxi, 2), covered the central island in a single span. Of these blocks no evidence had been found before. Also the shape of the holes in the surface of the Island had by now become clear (we shall have to decide on their meaning later on) and all seemed ready (Pl. xxxi) to receive the plant and start on the canal. H.H. Prince Yussuf Kamel had courteously lent to us a 16 H.P. steam-engine and a 4 inch centrifugal pump; for as we would have to pump against a 70 feet head we needed a good deal of power. But the power of the engine became first of all, and most inopportunately,

¹ *Journal*, I, Pl. xx.

manifest in its weight, and while its transport had already caused no small anxiety to the railway-authorities and those in charge of roads and bridges, we now had to face the problem of getting it down into our building. There was a slope of sand only and that Mr. Felton vetoed as unsafe. So we had no choice and were forced to discover the entrance. It was certain that it was somewhere to the north of the room excavated by Miss Murray and Lady Petrie in 1902. The cutting in the rock continued beyond the excavation, and was crossed at some distance by the brick temenos-wall of the temple-precincts. But nothing safeguarded us against the possibility that most of the floor was quarried away, as the walls might be. And as the passage was filled with more than 40 feet of wind-blown sand its clearance meant a vast expenditure to incur at a moment when we had no idea of what the canal had in store for us. But we were bound to proceed and with five hundred men we started the clearance (Pl. xxv, 2). As soon as possible the gravity-railway, already used in 1914, was reinstalled and the sand went out at both ends of the passage in trucks, pulled up by 16 or 18 men pushing an empty carriage down a slope (Pl. xxv, 1), while the rope ran over an old *sāḥiyah*-wheel placed upright. Thus the clearance was finished in three weeks (Pl. xxvi, 2). And fortunately our fears appeared not to be justified. The stone floor and most of the walls were intact, and the latter were covered with texts from the "Book of Gates" and the "Book of what is in the Underworld." The western wall with the "Book of Gates" is nothing but a variant of the inscriptions on the sarcophagus of Seti I in the Soane Museum, a most significant fact. Though all the decoration except that of the inner room was executed by Merneptah, there can be no reasonable doubt that it was designed by Seti. Moreover we found in the passage, besides various small objects, a most important hieratic ostrakon, which, read by Mr. Battiscombe Gunn, proved to be an account of the transport of stone for the building of the "Osireion." It proves that Seti I took (as we should expect of him) enough personal interest in the building of his large temple and the structure behind it to have a  ⲛⲓⲁⲓ, "castle," built on the edge of the cultivation, where he could stay now and then to follow the progress of the work. And the ostrakon also gives the name of our building:  ()     , "Seti I is serviceable to Osiris."

Finally our work in the passage gave us the necessary information concerning the entrance of our building. Curiously enough the entrance was sooner designed to keep people out than to let them in (Pl. xxvi, 1). There is no gradual slope leading down from the desert, but a large oblong brick shaft, such as we know from ordinary tombs, a significant parallel. The actual entrance was an arch in the bottom of the temenos-wall; but when we found it, it was almost completely bricked up; the bricks were stamped with the cartouche of Seti I¹. We had of course to open it to let the engine through and could now investigate the enigmatic canal.

Already at the beginning of the season I had wanted to get some more definite insight into the origin and nature of the water which surrounds the Island, and the Surveyor-General, realizing the importance of the question, had most obligingly consented to carry out an exact levelling of a number of waterpoints between the Nile at Balyanā and Abydos. In these wells iron rods were fixed, and from them we measured every month the depth of

¹ The arch consisted of five superposed layers of specially made thin bricks. These layers were not at right angles with the main axis of the passage but sloped alternately towards the inside and the outside. Apparently the arch was not made over a wooden framework, but with supports on both sides.



1

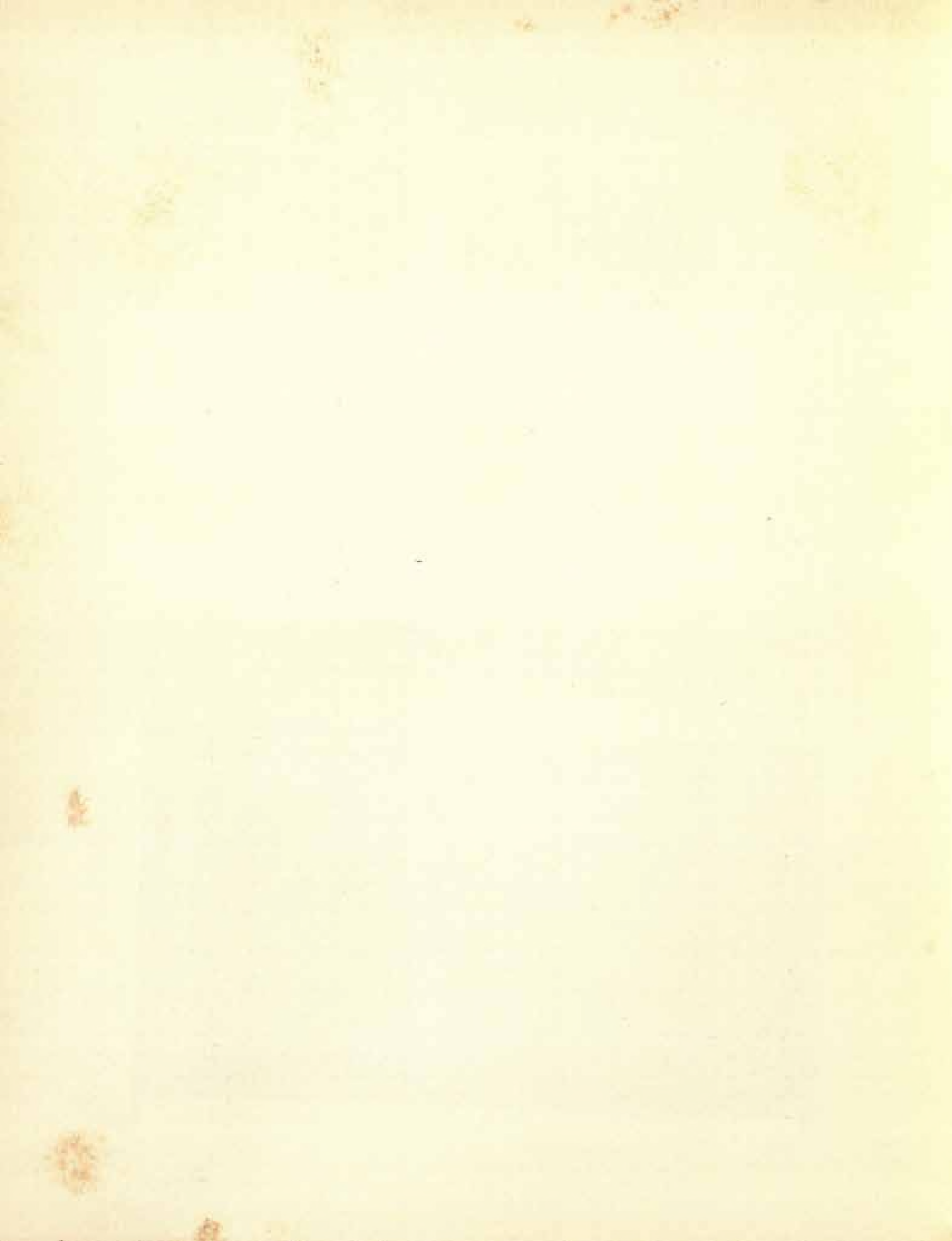


2



3

1. The gravity railway.
2. Work in the long passage.
3. Granite dovetail inscribed with the cartouche of Seti I.





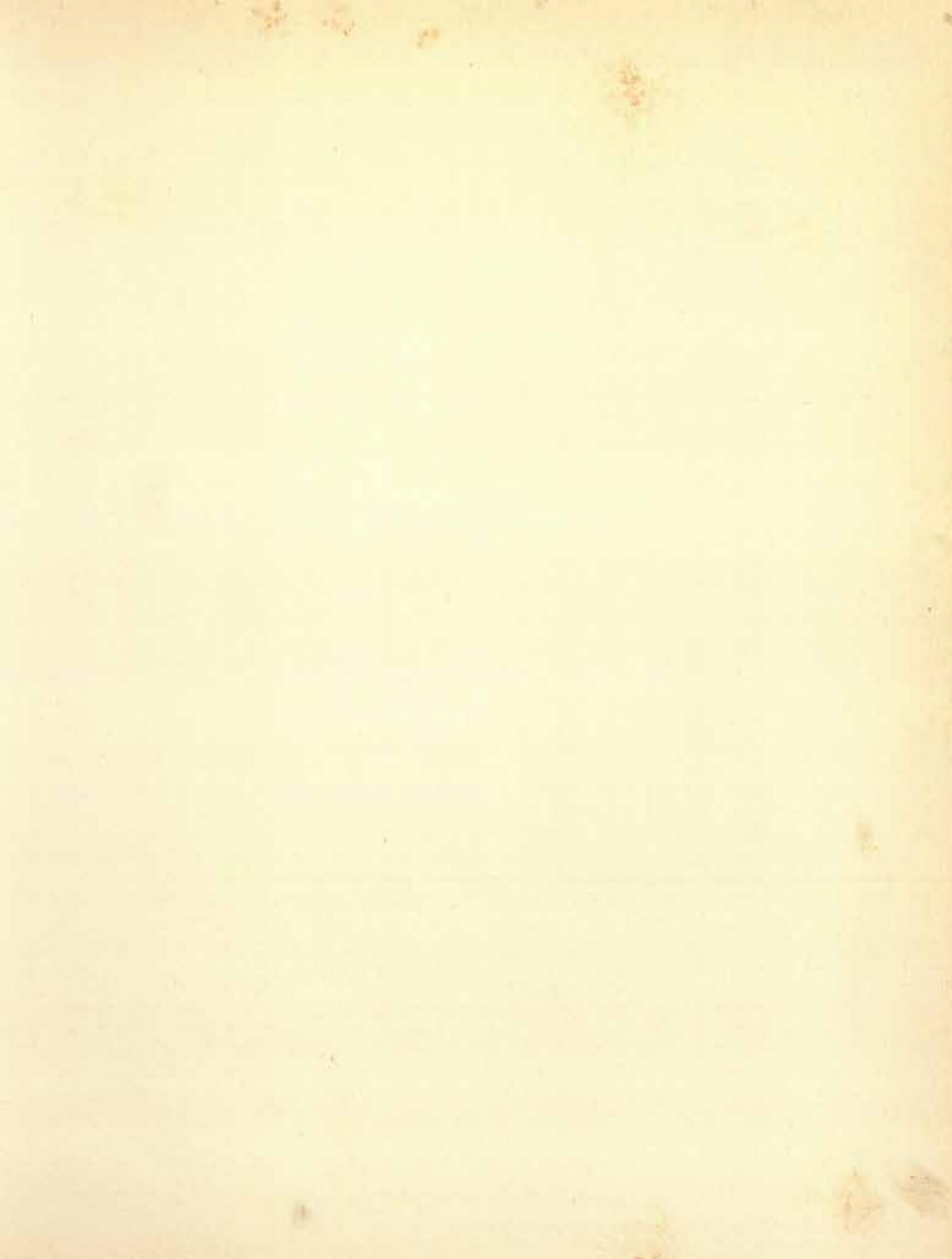
1



2

1. Entrance of Cenotaph: arch in the bottom of the temenos wall of the temple, with vertical shaft.
2. The entrance-passage cleared (looking from under the entrance arch to the local south).







1



2



3



4

1. North-east corner of Cenotaph (on the right, island with ledge and damaged pillar; in background, pier of backing-wall and cell opening on the ledge).
- 2 and 3. Pumping and clearing in west part of canal.
4. North-east corner of Cenotaph with dovetail in position.

the water. This measuring still continues, but it has become already clear that our set of curves tallies with those found by Ferrar for the subsoil water-table at Girgeh. Consequently the water in the "Osireion" is neither a well as Strabo calls it, nor a pocket as some archaeologists believed, but it is part of the sheet of subsoil-water which stretches out under the desert from the Nile. As the supply is therefore unlimited our only hope was that the immediate surroundings of the building would be more or less impermeable. Unfortunately they were not. If, after about an hour and a half of pumping we had got down the water for about 6 feet (Pls. xxiii, 1; xxvii, 3) and the engine stopped, then in half an hour the water was back to its original level (Pl. xxvii, 1). The only possible way to get forward was therefore to pump and clear simultaneously (Pl. xxvii, 2, 3). And so we succeeded in solving the problem.

Obviously there are three possibilities. Either the canal never was intended to be a canal at all, but was meant to be filled in. Or it was a dry corridor, running at a low level round the central island. Or, thirdly, it might have been meant to be a water-filled canal from the beginning. Against the first view there are the following arguments: stairs, which, as we shall see, were considered very important, run down from the island, fallen blocks are found more than 12 feet below the ledge, which shows that the canal was always open, and that this was the original idea is moreover proved by the careful way in which small bits of stone are let into the big blocks wherever these show a deficiency which is not of structural but only of aesthetic importance.

Now the fact that the ledges provide no accommodation for flooring-slabs in the corners of the canal and that no trace of flooring is found at any level in the canal itself, definitely excludes the possibilities of a covered or even an open corridor running round the central island.

On the other hand all the evidence fits in quite simply when we assume that a water-filled channel belongs to the original design of the building, which is already suggested by the great similarity between the Island with its ledge (Pls. xxvii, 1; xxiii, 1) and the quay at Karnak (Pl. xxx, 2). Now, as was already known, the stairs which lead from the Island to the water end in a sheer drop (Pl. xxii, 2). At the level where they end we saw no trace of a floor or of any arrangement to fit one in, and our long probing sticks also showed that at no other level was a flooring present. At a depth of about 24 feet below the ledge however we struck what the natives call *gebel moiya*, the hard layer on which the subsoil-water runs, and to which they go down to put the foundations of their *sâḥiyah*- and well-masonry. In all probability the foundations of our building go down to that depth at which lay the nearest stratum of sufficient solidity to carry them. But then there would be a distance of about 36 feet between the bottom of the foundation and the point where the roof of several thousands of tons rested, on one hand on the pier projecting from the backing wall, and on the other hand on the first pillar of the Island. To add rigidity to the fabric heavy thrust-beams were therefore built in halfway down the walls of the Island (Pl. xxii, 2). They would generally be under water, which, if we allow for the difference in the Nile level in Seti's time as compared with now, would, at its highest, just play over the lowest steps of the stairs and, at its lowest, probably just have enabled the builders to lay the foundations in the dry on the hard layer which we hit. I was naturally exultant when at last, on the 18th of April, with the certainty that with the funds at our disposal and the plant we had it was impossible to go much deeper, a remark of one of my best men who yelled out of the water that the large stone we saw was flush with the wall and went apparently into it led to the discovery of the thrust-beams, and I realized that its presence implied all the

conclusions which I have here, for clearness sake, put first. I could stop work there and then; but I continued for a few more days till we had found the corresponding beam on the other side. On April 22nd the work was finished; Mr. Felton stayed on, however, to remove the engine, clear up and complete the extensive photographic work, and returned only in the third week of June.

It is time to attempt to interpret the meaning of the building now that its architectural features have become clear. We have found that a vertical brick shaft led to a bricked-up entrance-vault. This excludes, of course, the idea that the building was a sanctuary in the ordinary sense or that it was in regular practical use. Then there follows a long passage with texts of a purely funerary character. Now the nearest parallel to the plan of the building in general is found in funerary monuments, viz. in the royal tombs of the New Kingdom at Thebes. That of Amenophis II (fig. 1) is most striking as it even shows the

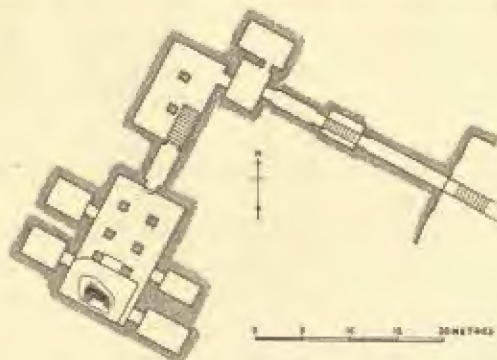


Fig. 1. Plan of tomb of Amenophis II.

turn in the approach to the sarcophagus-room. But all possess alike the long sloping entrance-passage, then a few anti-chambers and a hall with square pillars behind which comes the sarcophagus. The similarity is complete, only the Theban tombs have a sarcophagus where our building has its inner room. But that inner room is really nothing but a colossal sarcophagus. Its shape (Pl. xxviii, 2) and the fact that it was meant to be entirely closed point in that direction. And the roof-sculptures prove it beyond any doubt. There we see the sky-goddess Nut, once represented bending over the world of the dead while she protects King Seti between her outstretched arms; and another time she is shown, in a colossal composition of great beauty, exquisitely modelled, while Shu, the god of the air, lifts her from the earth (Pl. xxix, 1; cf. fig. 2). Now this scene is no mere *art pour l'art*, no meaningless decoration by a charming scene. We know from the Pyramid-texts that this scene of a primitive cosmogonic myth was used with magical purpose in connection with the equally ancient belief that the dead survived as stars in the sky. With a realistic turn of mind, which is, if common to all primitive people, particularly pronounced with the Egyptians, devices were now sought to convey the dead to the sky, and one of the solutions of that problem consisted of first bringing the sky down to the dead by identifying Nut with the sarcophagus or with the sarcophagus-chamber. Nut thus contained the dead; then magical texts were added, describing how in the first days of creation Shu lifted Nut, *with all which was in her*, up from the earth¹. The presence of these texts in itself, and perhaps

¹ Pyr. § 616 c-f; 782 b-e; 784-5; 1101. All the material has lately been combined and discussed by A. RUSCH, *Die Entwicklung der Himmelsgöttin Nut zu einer Totengottheit*. 1922.



1



2

1. The pumping plant installed.
2. The Sarcophagus Room (on the right, the hole broken subsequently through the back wall of central cell).





1



2

1. Nut bent over the earth while lifted up by Shu (Sarcophagus room). *Scale c. 20.*
2. Nun carrying the Sun-boat, and an Osirian burial on the Primeval Hill (after BUDGE, *Papyrus of Anhai*).



1



2

1. The Central Hall (looking towards backing-wall ; above, in background, the back of the temple).
2. Quay of the temple of Karnak.

also a ritual carried out when the tomb was actually taken into use, provided the necessary sympathetic magic to effectuate what was described or represented. The representation of Nut lifted up by Shu fulfils in our inner room no doubt the same function as in the sarcophagus-room of Ramesses IV and in some funerary papyri (fig. 2) where it recurs, and in the pyramids of the Sixth Dynasty, and we are therefore entitled to interpret our room accordingly as sarcophagus or sarcophagus-room. Thus we find that the ground-plan of our building, its entrance with its closed arch and its deep vertical shaft, the texts it contains

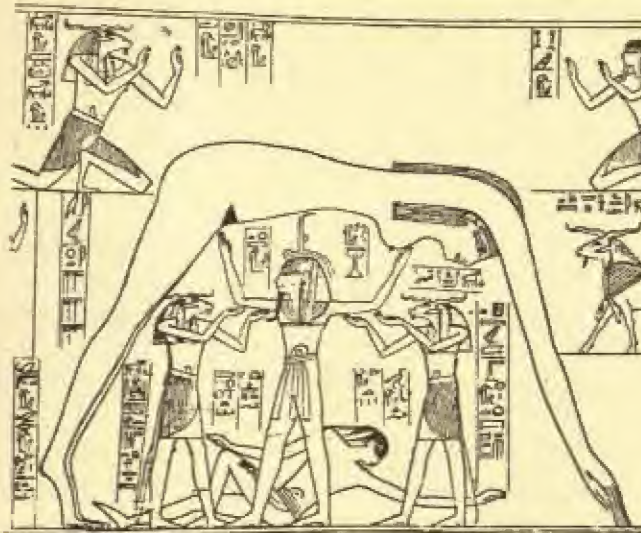


Fig. 2. Shu lifts Nut from the earth. (After BUDGE, *Greenfield Papyrus*, Pl. CVI.)

and the trees which surround it consistently prove its funerary character. But Seti I was buried at Thebes. Consequently our building can only be the cenotaph which he, like all Egyptians who could afford it, erected at Abydos where Osiris was said to be buried. And this interpretation also explains the unparalleled features of its central hall.

A glance at the plan (Pl. xxii, I) will suffice to show that the Central Hall can never have been used. The entrance leads on to a ledge, with the water deep below, where one stands closed in by two projecting piers (cf. Pl. xxiii, 1). Neither the ledge in front of the cells on the sides nor the island can be reached. On the other hand we have a double flight of steps which lead down from the island into the water. They were considered very important indeed. This is not only shown by the fact that in the construction of the island the space which they were to occupy was left open and is as well finished as the other parts of its outer sides, while the steps were actually worked into the great blocks. It is also evident from the indications of steps which are apparent on the western side, where they evidently were not yet finished (like so much in the building) when the work had to be stopped (Pl. xxx, 1). Obviously the steps were considered an essential feature of the building, though they lead nowhere. And there remains only one possibility: as the Central Hall with its island and its water can never have been used, it must have been merely the expression in stone of an idea. And again this idea finds its oldest expression in a cosmogonic myth. In the beginning of creation, so the theology of Heliopolis taught, one spot of the earth, the Primeval Hill, had risen out of the Primeval Waters. There the creator Rē stood, and there he stood again every morning at sunrise. Now we know that the rising and setting

of the sun was understood in Egypt as elsewhere as symbolical of life and resurrection; and so the Primeval Hill became, *par excellence*, the place where death was vanquished and life renewed. It is of course quite impossible, within the scope of this article, to discuss the further developments of that thought in Egyptian religion¹. We know that with the coming of the Fifth Dynasty the Re^c-religion became that of the state and spread through the country. With it went the view as to the Primeval Hill, the place of renewal of life. And in the subsequent fusion of the Re^c-religion with the faith in Osiris, the god who died and was resurrected, the Primeval Hill most appropriately became the place for Osiris' tomb, as it was through his burial that he had reached immortal life. Now we know that the Primeval Hill, at Hermopolis and elsewhere, was represented by a double flight of steps. And on such a double flight of steps we find in various representations Osiris entombed or enthroned as ruler of the dead (fig. 3)². This burial of Osiris on the Primeval Hill is referred

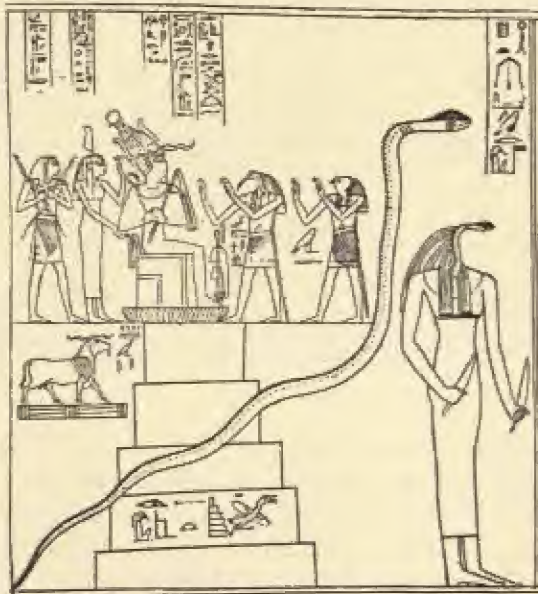
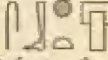
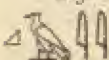




Fig. 3. Osiris enthroned. (After BUDGE, *Greenfield Papyrus*, Pl. CVIII.)

to in the famous "Steps of Osiris at Abydos" near which every dead man prayed to be interred. But the king, identified with Osiris, could afford to build for himself these steps. In the holes in the surface of the island one is inclined, guided by their shape, to see tentatively the places where a sarcophagus and a shrine for Canopic jars represented an Osirian burial. The cells all round are, as Professor Naville suggested, the  of the Book of the Dead, conventionally translated *pylons*, better *cells* or *halls*. It is typical of Seti I that he did not shrink from following out to its last consequences the dualism of a religious conception; that he clung to each separate dogma of orthodox tradition even when no consistent combination was possible. His cenotaph was planned on the lines of a royal

¹ This is most ably done by A. DE BUCK, *De Egyptische voorstellingen betreffende den Overhevel*. See Dr. Hall's review in *Journal*, 1924, 185 ff.

² E.g. BUDGE, *Greenfield Papyrus*, Pl. CVIII; LANZONE, *Diz.* CCXI; cf. also the determinative of   , e.g. in SETHE, *Urk.*, IV, 364.

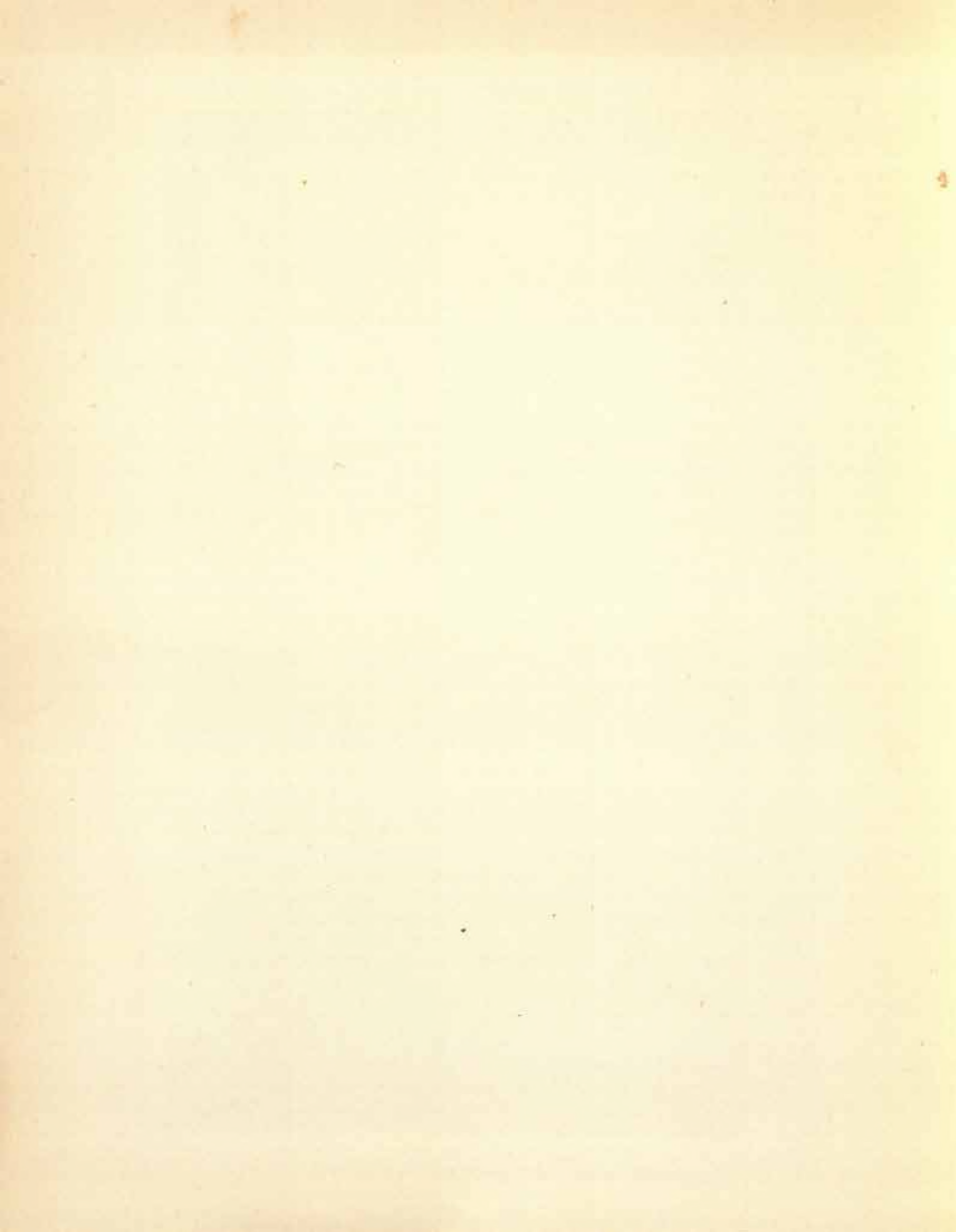


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


2

1. The Central Hall (looking towards local west).
2. The Central Hall (looking towards local east).



tomb, and as such it possessed the sarcophagus-room with the Nut-representations. But the traditional identification of the dead king with Osiris, which was bound to come to the foreground at Abydos, was also to be expressed in the building; and therefore it contained an architectural representation of the Primeval Hill surrounded by the Primeval Waters.

That our interpretation is no merely possible theory but is correct is shown by an important vignette in the Papyrus of  Anhai, in the British Museum. Here we see a very rare representation (Pl. xxix, 2)¹, the god of the Primeval Waters Nun lifting up the sun-boat and Osiris encircling the Duat. This representation, so far as I know, recurs only twice elsewhere: once on the alabaster sarcophagus of Seti I in the Soane Museum, and once on the wall of our entrance-passage which, as we know, bears variants of the same texts. We therefore have the strongest possible proof that the cenotaph of Seti I and the papyrus reflect the same none too common group of thoughts, and as the representation of Nun is found at the end of the entrance-passage of our building just before one turns round towards the Central Hall, so this same representation precedes on the papyrus an actual drawing of a similar hall shown in a typically Egyptian way partly in plan and partly in section². We see the pillars in plan; a blue colour indicates the all-embracing waters, and below we see the double flight of steps, which we know as a conventional representation of the Primeval Hill, with the Osirian dead on it.

It is typical, as I have said already, that Seti should be the first and last king to have undertaken this extraordinary architectural expression of things religious. For Seti was the first great king after the Akhenaten heresy who cared again for spiritual matters. Akhenaten had tried to free Egyptian religion from the formalism and magical ritualism in which it had become entangled, by a fundamental innovation. He failed. Seti I, as we know from his modestly recorded restorations, pursued the same aim by following the lines of tradition. His failure became only apparent under the Ramessides. But his cenotaph at Abydos bears witness of his truly heroic attempt.

¹ BUDGE, *The Book of the Dead. Facsimiles of the Papyri of Hunefer, Anhai, etc.* 1899. Pl. viii.

² For other examples of this way of representation in Egypt see SCHÄFER, *Von Ägyptischer Kunst*², 119, fig. 74 and *passim*.

NOTE ON THE RUINS OF ḤITÂN SHENSHEF, NEAR BERENICE

By G. W. MURRAY

With Plates xxxii and xxxiii

The site of Shenshef, 21·5 kilometres S.S.W. of Berenice, had previously been visited by Barth¹, 1846, and John Ball², 1908. Barth considered it a settlement of people from Berenice, while Ball thought it might be a mediaeval slave-dealers' stronghold, where slaves were concentrated before shipment to Arabia. As a matter of fact, there seems no reason for any settlement on the site except the presence of water relatively close to Berenice. The water was abundant at the time of my visit, January 1925 (after heavy rain in December 1924), but less so in 1908 when Ball was there. It is rather salty to the taste, though quite drinkable. In addition to some shallow wells in the valley just below the town (not shown on map), there was a pool 15 metres long and 0·5 metre deep, through which the camels had to wade on their way to the ruins. There is, however, a surprising lack of vegetation in the neighbourhood, so that the 'Ababda and Bisharin drive their camels to the water from some distance, and make no use of the site, a steep-sided gorge with no grazing, as a permanent settlement. This has contributed to the remarkably good preservation of the ruins (Pl. xxxii).

As the photograph (Pl. xxxiii, fig. 2) shows, many of the rubble houses, built of a quartzose schist, are, though roofless, in very good repair, and practically no deposition of sand or soil has taken place. As at the emerald mines of Sikeit and Zabara, the walls contain many handy niches for storing small objects.

The potsherds are relatively scanty, and all of ribbed ware, with a very few exceptions of that green glaze which I have come to consider as marking Arab rather than Roman influence. There are no mines or quarries, none of the millstones for grinding quartz which abound at many water-sources in the Eastern Desert, and no slag-heaps. Nor is there any ground which could have been cultivated.

I found no inscriptions, nor was Barth more fortunate in 1846. There were numerous graves in a valley north-east of the "acropolis," but all had been plundered in very recent times. I spent an afternoon seeking vainly for an unplundered tomb.

I came to the conclusion that the site had been occupied for only a short time (few sherds) by people who were not normally desert-dwellers, and that it probably represented an autumn station for the officials and merchants of Berenice. Shenshef, shut in between rocky hills, must be an unpleasant place in hot weather, but it was evidently preferable to Berenice, where fresh water had to be brought from a distance, and where the absence of building stone compelled the people for the most part to live in matting huts. According to Pliny, travellers departed to India from Berenice "at midsummer, before the rising of the Dog-star, or else immediately after"; while they set sail from India on their return

¹ *Zeitschrift für allgemeine Erdkunde*, VII, 1-31.

² *Geography and Geology of S.E. Egypt*.



Plan of buildings at Hifan Shenshef.

Scale 1:5000.





1



2

1. Graves of oxen at Êr Arîb.
2. House at Hîtân Shenshef.

journey "at the beginning of the Egyptian month Tybis, which is our December, or at all events before the sixth day of the Egyptian month Mechir, the same as our Ides of January." It follows therefore that the port of Berenice was more or less deserted between July and February, and I suggest that such of the officials and merchants as could not get away to the Nile spent the autumn at Shenshef. Indeed I like to think that the anonymous author of the *Periplus of the Erythraean Sea*, who is supposed to have been a native of Berenice, penned that absorbing narrative at his leisure in one of the houses of Shenshef.

There are two much smaller villages of roughly rectangular houses at no great distance from Shenshef, at Ḥiṭân Rayyan and Umm Etli, which I take to be rough Bedouin imitations of the culture of Shenshef. These sites will be shown on the shortly-to-be-published 1:100,000 map series of the Red Sea Coast by the Survey of Egypt. There must have been quite a large number of Gebadei more or less settled round Berenice and Shenshef selling milk, goats and sheep, and these may have been impelled to live for a time in houses, like the foreigners out of whom they made their living.

A note is necessary. The houses shown in solid black on the plan are those which evidently had two stories.

WHAT HAPPENED AFTER THE DEATH OF TUT'ANKHAMŪN

By A. H. SAYCE

The interesting letter of the Hittite king, Mursilis III, the first translation of which was given by myself in *Ancient Egypt*, 1922, Pt. 3, recording the request of Tut'ankhamūn's widow that he should send one of his sons to her whom she would marry and make king of Egypt, has unfortunately lost its conclusion and consequently the end of the story has hitherto remained unknown to us. This is now supplied by a text from Boghaz Keni recently edited by Götze (*K.U.B.*, xiv, No. 8) and entitled by him "Pestgebet des Mursilis." The commencement of the text is lost and there are fragmentary duplicates of the text itself (Nos. 10 and 11).

Here is my translation of ll. 13-31:

- (13) "[Now as to the men] of the city of Kurusta, the men of Kurusta subsequently
 - (14) [Tessub of the Hittite city] settled in the land of Egypt. These Tessub of the Hittite city subsequently
 - (15) [bound] by covenant with the Hittites; so they having sworn alliance through Tessub of the Hittite city
 - (16, 17) the Hittites and the Egyptians also swore alliance through Tessub of the Hittite city. Then came the Hittites
 - (18) (and) turned round. So the oath to the god the Hittites were the first
 - (19) to break. Now my father sent men (and) horses, and they attacked the border-land of Egypt (namely) Amga, and then he sent (more);
 - (20) and they attacked again. Thereupon the Egyptians were terrified;
 - (21) they came and asked my father to send his son as their king.
 - (22) Accordingly thereupon my father gave them his son; thereupon they conducted him (to Egypt).
 - (23) Then they murdered (him). And he was buried (?) there. He (i.e., my father) into Egypt
 - (24) marched. The land of Egypt he smote and the men and horses of Egypt they destroyed.
-
- (25) But there Tessub of the Hittite city my lord beheld (it). He (i.e., my father) summoned him to execute judgment.
 - (26) So then the men (and) horses of Egypt he attacked and slew [them]. Whatever man...
 - (27) he captured [they] afterwards brought back to the land of the Hittites.
 - (28) Among the capturers the death-penalty was adjudged. They [were condemned] to death.
 - (29) Afterwards the capturers carried [them] to the land of the Hittites. So the death-decree
 - (30) the capturers brought to the land of the Hittites. Then in the land of the Hittites
 - (31) on the same day they were put to death. Then I caused this document (*lit.* tablet) to be found in the land of Egypt."

The Hittite text is as follows:

- (13) [nu NISU-MES]-*as-ma ša* ALU *Ku-ru-us-ta-am-ma ma-akh-kha-an*
 (14) [ILU TESSUB ALU *Kha-at-ti*]-*ti i-na* MAT ALU *Mi-iz-ri bi-e-da-as nu-us-ma-as*
 ILU IM ALU *Kha-at-ti ma-akh-kha-an*
 (15) [*is-khi-u-*]-*ul a-na* NISU-MES ALU *Kha-at-ti me-nu-akh-kha-an-da i-ya-at nam-*
ma-at is-tu ILU TESSUB ALU *Kha-at-ti*
 (16) [*li-in-*]-*ga-nu-wa-an-te-es nu* NISU-MES ALU *Kha-at-ti ku-it* NISU-MES ALU
Mi-iz-ri-ya
 (17) *is-tu* ILU IM ALU *Kha-at-ti li-in-ga-nu-wa-an-te-es e-se-ir nu u-e-ir* NISU-MES
 ALU *Kha-at-ti*
 (18) *bi-ra-an wa-akh-nu-e-ir nu-gan ni-is* ILU-LIM NISU-MES ALU *Kha-at-ti khu-*
o-da-a-ak
 (19) *sar-ri-i-e-ir nu a-bu-ya* ZAB-MES ANSU-KUR-RA-MES *o-i-ya-at nu* ZAG MAT
Mi-iz-ri MAT *Am-ga wa-al-akh-khi-ir nam-ma-ya o-i-ya-at*
 (20) *nu nam-ma wa-al-akh-khi-ir* NISU-MES ALU *Mi-iz-ri-i-ma ma-akh-kha-an*
na-akh-ša-ri-ya-an-ta-at
 (21) *na-at u-e-ir nu a-na a-bi-ya* MAR-ŠU [SARRU]-*o-iz-na-an-ni an-ma u-e-ki-ir*
 (22) *nu-us-ma-as ma-akh-kha-an a-bu-ya a-bi-e-el* MAR-ŠU *be-es-ta na-an ma-akh-*
kha-an bi-e-khu-te-ir
 (23) *na-an-gan ku-e-en-ni-ir a-bi-ya-ya kab-be-la-az-sa-at-ta na-as i-na* MAT *Mi-iz-ri*
 (24) *pa-it nu* MAT ALU *Mi-iz-ri wa-al-khi-ta* ZAB-MES ANSU-KUR-RA-MES *ša*
 MAT ALU *Mi-iz-ri ku-en-ni-ir*
-
- (25) *nu a-bi-ya-ya* ILU IM ALU *Kha-at-ti be-li-ya a-us-[ta]* *kha-an-ne-es-ni-it sar-*
la-a-it
 (26) *nu-za* ZAB-MES ANSU-KUR-RA-MES *ša* MAT ALU *Mi-iz-ri tar-akh-ta na-*
at-gan nu NISU-MES *ap-pa-an-[te-es]*
 (27) *ku-in e-ip-tam na-an ma-akh-kha-an i-na* MAT ALU *Kha-at-[ti]* EGIR-*pa u-wa-*
te-e-[ir]
 (28) *nu-gan i-na lib-bi* NISU-MES *šu-lu-bi-ZUN khi-in-gan ki-[sat]* *na-as ak-ki-is-*
ki-o-an da-[i-ir?]
 (29) *ma-akh-kha-an-ma* NISU-MES *šu-lu-bi-ZUN i-na lib-bi* MAT ALU *Kha-at-ti*
ar-nu-e-ir nu-gan khi-in-ga-an
 (30) *i-na lib-bi* MAT ALU *Kha-at-ti* NISU-MES *zu-ab-tum-tum u-te-e-ir nu-gan i-na*
lib-bi MAT ALU *Kha-at-ti*
 (31) *a-be-e-iz-za* UD-KAM *ak-ki-is-ki-it-ta-ri nu-za ma-akh-kha-an e-ni* Iup-*pa*
 (32) *ša* MAT ALU *Mi-iz-ri bi-ra-an u-e-mi-ya-nu-un.*

Notes.

13. Kurusta was in Northern Syria and corresponded to the Kyrrhestica of classical geography (see *K.U.B.* xv, 34, 1, 54). The city of Kyrrhos was on the slopes of the Taurus mid-way between Aleppo and Mer'ash.

16. Literally "being under oath by Tessub." A fragmentary tablet in my possession (l. 5) has *ša li-ga-i*; *ma-mi-ti* "ligai, i.e. oath."

18. Literally "made go round inside." The original signification of *biran* is "within," not "before" as Götze makes it. See *K.T.*, iv, 3, 11, 17: *memian kuinki sapat biran parā* [*sarā*] "whatever is below, within, outside [or above]." *Biran khuiyanza* is "he who hastens to" another. Hrozný was probably right in reading *Ê-ir* "house" *bir*.

19. Amga, called Amki in the Tel el-Amarnah tablets, is the Umq or "Plain" of Antioch, Unqi in the Assyrian texts, Amiqu in the Syrian list of Tuthmosis III (No. 308), the Amyces Campus of classical geography. This passage indicates that it formed the boundary between the empires of Egypt and the Hittites¹.

20. Literally: "had been terrified."

21. The signification of *an-ma* (or *ilu-ma*?) is unknown to me.

23. *Kabbelazzata* is marked as a foreign word, so we can hardly regard it as a compound of *kabbis* "small." For *abiya-ya* see l. 26.

24. *Walkhita* seems to be used here in a passive sense: "was smitten."

25. Cf. WITZEL, *Hethitische Keilschrift-Urkunden*, i, 94, l. 44: *nu abiya-ya AN TESSUB bikhassassin sartiskimi*, "I there invoke Tessub." It is possible that *abu-ya* "my father" has dropped out of the text through the influence of *abiya-ya*, since the duplicate text inserts *at-ta-as-mi-in* (a mistake for *at-ta-as-mi-is*) "my father."

28, 29. The duplicate text has the Assyrian *za-ab-du-ti* "capturers" instead of *sulubi*, thus giving us the signification of the proper name Khalsa-sulubis ("Capturer of Aleppo"). The word must have been a technical one denoting "one who arrests," "a policeman," and thus differs from the more general term *appantes* (l. 26). *Khingan* signifies "destiny," and hence "death."

30. *Zab-tum-tum* must have been pronounced *zab-tuw-tum*. So *eptam* in l. 27 probably stands for *eptû*.

We learn from the above that the Hittite king actually sent one of his sons to Egypt. But apparently he was murdered before he could reach the queen, or else the queen herself had already been put to death. At all events there is no reference to her, much less to a marriage, and it would appear that the murder of the Hittite prince took place in Syria.

It may be gathered from the badly-expressed and inaccurately written Hittite text (which like most other Hittite texts illustrates how unlike the written Hittite language must have been to the spoken language of the people) that after slaying "the men and horses" of the Egyptians the guilty parties were captured and carried off to Asia Minor, there to be formally arraigned before a sort of court-martial and adjudged to death. The whole procedure is very curious and can be explained only on the supposition that there was a recognised code of international law and that in the case of the representatives of a political party in a foreign country, if accused of injuring the members of another kingdom, it was necessary that certain legal formalities should be observed. The Hittites, we may infer, would have had no legal right to put to death their highly-placed captives if a Hittite prince had not been concerned in the revolution in Egypt. Their murder of him brought them under the jurisdiction of what may be termed a court of international law. Its officers in the Hittite kingdom bore the technical name of *sulubi* which would correspond to the French *huissiers*.

¹ Cf. what Mursilis III says about his father Subbi-luhuma (*K.T.* v, 6, iii, 1-13): "Now while my father was down in Carhemish, he sent Lupakkis and Hadad-zalmas into the land of Amka; so they went; the land of Amka they devastated; the spoil, oxen and sheep, they brought back to my father. And when the men of Egypt heard of the destruction of Amka they were terrified. Now their lord Bibkhourias (Tutankhamûn) had recently died, so the Egyptian queen whose name was Dakhamûn (*read* Sakhamûn) despatched an envoy to my father and wrote to him as follows: 'My husband is dead; I have no children. You, however, are said to have grown-up (*megganis memiganzû*) sons; if you send one of them to me and he becomes my husband, [well!]' The characters *da* and *ša* have similar forms in the Hittite script and the scribe could easily mistake the one for the other.

² Or "bailliff of Aleppo"?

A NEW DUPLICATE OF THE HOOD PAPYRUS

By S. R. K. GLANVILLE

There is a document (No. 10379) in the Egyptian Department of the British Museum, hitherto unpublished, which is of considerable interest. It is a badly preserved strip of leather 2 ft. 11 ins. high, with an average width of about 8 ins. In many places it has been torn by shrinkage, and in fact it is now in three pieces¹. Its surface, discoloured in parts by natural stains, is scored with black lines, some of which are exaggerated by cracks, apparently due to doubling over. These flaws in the leather combine to make the hieratic text inscribed on it frequently illegible. Further, it seems probable that at some time in its earlier history part of the writing was subjected, presumably by accident, to an erasing fluid, for a few words from the middle of lines 2 to 6 of the *recto* have been lost, leaving no trace, and for no apparent reason, while the *recto* ends 10½ ins above the bottom of the strip, at a point well before the end of the text as we know it from other sources. This however is more likely to have been intentional; at any rate there is not the slightest trace of any sign after the body of the writing stops.

Although the *verso* is inscribed, it takes us no further, as it only provides a duplicate of the middle portion of the text on the *recto*. The latter contains 36 lines of hieratic, written right across the 8-inch width of the strip (except where it has been erased, and in the last line, which ends less than half way across), the *verso* 24 shorter lines, which have suffered less from the poor condition of the leather, whose edges show an even greater deterioration than does the rest of the surface.

An examination of the text showed that it was a duplicate of the B.M. Papyrus 10202, better known as the Hood Papyrus². I have to thank the Keeper for permission to draw attention to it here. It may be objected that this notice is inadequate without a transcription of B.M. 10379, a new collation of B.M. 10202 and a translation based on a study of the two papyri. But the existence of a third and considerably longer recension of the text³, soon to be published by Dr. Alan Gardiner, who informs me that he will include 10379 and a new collation of 10202 in his edition, makes any attempt at a detailed study here superfluous. Still, a few notes on the general nature of the document may be of interest to those who have not read Maspero's essay on the Hood Papyrus.

The contents are outlined in the short introduction, at least one third of which is lost in B.M. 10379. The writer, assuming the role of learned teacher, is to instruct his pupils as to everything "that Ptah has created and Thoth has registered," heaven and the stars, earth and the waters and hills—"everything that is in Heaven above, and on the Earth beneath," almost in so many words. Beginning with elemental phenomena, the sun, moon, stars, storm, darkness, light, the true nature of the document rapidly becomes apparent as a classification of terms covering the whole field of existence. The elements are succeeded by a list of all forms of water in nature and art (from river and sea to pond and reservoir);

¹ Mounted in one sheet as if intact.

² See MASPERO, *Un manuel de hiérarchie égyptienne* in *Journal Asiatique*, 1888, 250 ff.; and ERMAN, *Die Literatur der Aegypter*, 240.

³ The Golenischeff Glossary.

these again by land forms, vegetation and soil. So far the list has consisted of inanimate objects and forces of nature, and plants. The remainder, until its premature end in the case of Hood, is devoted to *beings*. The first four are supernatural—God, Goddess, Male Spirit, Female Spirit—but from this point on we have human beings, arranged in a hierarchy, which starts with King, and runs through the whole gamut of Egyptian officials, civil, military and religious. Before the end of this B.M. 10379 breaks off, with "Superintendent of the Bakery of the Lord of the Two Lands" as its last entry (= Hood 26); Hood itself continues with more priestly categories, and then passes to trades, breaking off in turn, after enumerating some twenty of them, including bakers, pastry-cooks, sculptors, porters, and cobblers.

In the strict use of the word such a list of terms cannot be called a glossary. Yet that is its practical value for us, as implied in the grouping under imaginary headings, and in the careful attention paid to order within the groups, especially that which enumerates the officials. The grouping supplies at least the class to which uncommon or difficult words belong—the text contains a number which rarely occur elsewhere, and more than one ἀπαξ λεγόμενον—a distinct step towards lexicography. The order offers a differentiation within the group and a certain definite relationship—that of precedence—between the members which, while it cannot define them closely, can often give us further information than we already possess. The importance of such a list for the better understanding of the language is therefore considerable. This is enhanced by the complete absence of true glossaries or vocabularies of any sort in Egyptian. Lists of certain classes of words occur—on ostraca, and included in many well-known texts—the names of Syrian towns worked into *Anastasi I* for instance, or the captured cities from the Karnak reliefs and others, the lists of peoples and of woods (with the objects made from them) of the B.M. writing-board 5647 and ostracon 50733 respectively, besides innumerable accounts. They may often help in the closer definition, or even identification of a word, but none of them, not even the Golenischeff Glossary and its duplicates, can be compared with the true glossaries of the Babylonians.

It is not difficult to see the reason for this absence in the one civilisation as opposed to the plenitude of the other. The Egyptians, so far as we can see, invented their own writing to express their own language, and the two interacted on one another as they developed. In Mesopotamia the Sumerian people, with a writing of its own, was early invaded by a Semitic-speaking people with no writing known to us who quickly saw the advantages of this method of putting their language into concrete form, and so began to use it to express their own speech. First copying the actual Sumerian writings as they saw them, but reading them as their Akkadian equivalents, they learned in time to appreciate the syllabic nature of the script they had taken over, and so to equate the Sumerian word with its Akkadian counterpart correctly spelt. Thus the true glossary arose from necessity, and as a development of the earlier mode of using imperfectly understood groups of signs to *express ideas*, rather than to *write words*. Later this convenient non-semitic script became the medium for writing other non-semitic languages, and as it was necessary for "international" scribes to be conversant with these, the result is that Kassite-Akkadian, and Sumerian-Akkadian-Hittite glossaries are found to-day on the cuneiform tablets; to this list a very important addition was recently made in the publication by Messrs. Sidney Smith and Gadd of an Egyptian-Akkadian vocabulary¹. But it is important to notice that

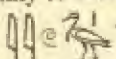
¹ *Journal*, xi, 230 ff.

while this diplomatic language of the scribes of Western Asia owed its existence as such to the preponderance of Babylonian political influence throughout the history of this period the idea of making syllabaries was due to the Semitic Babylonians' early necessity of inventing glossaries, for the purpose of understanding the language and culture from which they borrowed the script in which to express their own speech, and by means of which they learned also to understand the script itself. Egypt, without this necessity and with a less conscious interest and care for her writing, naturally never felt the need for glossaries. The most consciously literary of ancient peoples, the Greeks, did not turn to lexicography till long after their language had passed its classic age.

Any detailed comparison of the texts of the B.M. papyrus 10202 (Hood) and of the leather roll 10379 would be out of place here. But it is worth while to note the difference in date between the two texts, which, though not great, is signified by a very considerable difference in the two handwritings. I suggest below that the leather strip is to be dated to the Nineteenth or the Twentieth Dynasty. Maspero (*op. cit.*) places the Hood Papyrus between the Twenty-first and Twenty-sixth Dynasties¹. Orthography and spelling are found to vary in individual cases within the same Dynasty. It is not surprising therefore that even in the comparatively short period that intervened between the writing of the two papyri there should have been scope for a large number of variant readings. These variants are not always confined to different readings of the same words; thus in ll. 11 and 12 of B.M. 10379 the list of words determined by the water sign contains eight words² that are not found in Hood (to be inserted between *sdt* and *wdn* of H. 9), while a line further on Hood gives two words which are missing in the duplicate. The latter should therefore be of some independent value for the full edition of the text, and it remains to be seen how far the Golenischeff Glossary will support one or the other, or give an entirely different reading.

The writing of B.M. 10379 is rather large, uneven and inclined to be careless. The majority of the signs are sufficiently consistent in their resemblance to those of well-known dated papyri to enable us to place the document not earlier than the end of the Nineteenth and not later than the end of the Twentieth Dynasty. Certain of the signs however have an individualistic character, which, with some peculiar examples of spelling, makes the writing interesting for its own sake, as well as for its contents. It is a small point, which cannot have much weight in the question of dating, but which is interesting in view of Maspero's indecision as to whether the text was actually a work by "Amenemope, son of Amenemope," as Hood states³, that the name of the father of the writer of our text is Prennefer. The writer's own name is unfortunately lost. P(a)rennefer does not appear to be a common name, but it belongs to a judge of the Nineteenth Dynasty, whose stele is in the British Museum (No. 283), and occurs on another stele in Turin⁴, where it is associated with other Nineteenth to Twentieth Dynasty names. There is no reason to suppose that the "son of Prennefer" was the original author of the text; on the other hand it is highly probable that we owe this copy of it to him⁵, and that, as Maspero was inclined to think

¹ It would appear certainly to date to the Twenty-first to Twenty-second Dynasties.

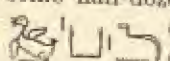
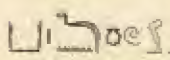
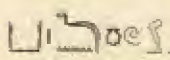
² At least one of these,  occurs in the Gol. Gloss. See the ref. to the article "jbr" in the new Berlin Dictionary.

³ Cf. ERMAN, *ibid.*

⁴ LIEBLEIN, *Dictionnaire de noms hiéroglyphiques*, IV, 955.

⁵ Or to a pupil of his whose name is lost. See ERMAN, *Die Ägyptischen Schülerhandschriften aus den Abhandl. d. Preuss. Ak. d. Wiss.* 1925, *Phil.-Hist. Klasse*, Nr. 2, 10 ff.

was the case with the Hood Papyrus, the actual writer of the document has inserted his own name as that of the author. At the same time the considerable use of Semitic loan-words makes it unlikely that the original text was written before the end of the Eighteenth Dynasty at the earliest, and probably not until after the reign of Seti I.

Finally, although the largest of the three examples¹ of this text has come to be known as the Golenischeff Glossary, there is no reason to suppose that the compiler regarded it as a lexicographical work at all. On the contrary, whether the information contained in it was for practical use or not, to the eyes of an Egyptian it can only have appeared as a list of phenomena in the universe, of which the principal *motif* was the strict order of precedence. And in this new duplicate—so far are we from the literary device of a “glossary”—there would seem to be some evidence for imputing a practical motive to the writer. I mentioned above that the *verso* of B.M. 10379 contains 24 lines of text (in the same hand as the *recto*), but that, unfortunately, these only repeat part of what has already been written on the *recto*. At first sight this looks like any other example of the young scribe's exercises, to which we owe so much of our knowledge of Egyptian literature. It might have been conjectured that the *recto* contained the master's example, and the *verso* a copy of part of it by a pupil. This is put out of court by a consideration of the handwriting alone. Furthermore no one would choose the back of a piece of writing material to copy out a lesson which was inscribed on the front. It is possible to conclude that both *recto* and *verso* are the pupil's exercises. But in that case why should he have made an excerpt of the *central part* of his first copy, when the title and opening lines, being of a more general nature, and including phrases which occur commonly, would be of more practical use as a writing exercise? On the other hand, putting the exercise hypothesis on one side, we may note a consistent tendency to “gut” the complete work, shown by both *recto* and *verso*. The principle at the back of each has been the same. In the *recto* although the title and introduction is inserted, and is followed up by a list of water and land forms, the bulk of the text enumerates the great officials and officers, including the highest ecclesiastics, but stops as soon as these are concluded, omitting the remaining orders of the priesthood, and all the tradesmen, who follow². The *verso* begins with “spirit” (*recto*, 15 = Hood, 11), and is almost entirely concerned with the royal family and a few of the most important civil and military orders, and soon comes to an end—the lines are much shorter than on the *recto*—with *ty sryt*, “standard-bearer” (*r.* 24 = Hood, 18). It contains some half-dozen variants from the *recto*, chiefly unimportant differences of spelling: but  (l. 23) “charioteer” for the  of *r.* 24 (=  of Hood) suggests that the writer was compiling his second, abbreviated, version from memory. Taking everything into consideration it is impossible to believe that the writing on this strip of leather represents the fruit of a scribbler's idle moments; there must be some reasonable explanation for its existence. It appears improbable that it was an ordinary “pupil's” exercise. But it is possible to conjecture on the evidence shown, that some scribe, connected with the court or a government office, or even some high official himself, wrote the text on the *recto* of B.M. 10379 as a

¹ Fragments of the text are known on ostraca, and the opening sentence occurs on the *verso* of Pap. Boulaq IV. (See MASPERO, *op. cit.*) Cf. also the important late M.K. papyrus from a tomb beneath the Ramesseum, a part of which—the list of Nubian fortresses—was published by Dr. Gardiner in *Journal*, III, 184 ff.

² This assumes that the writing originally ended with *ab tny* as now. See above, p. 172.

practical guide to the order of precedence to be observed in public functions, and in order to memorise the kernel of the matter, or after having done so, made the second copy, preserved on the *verso*¹. We have come a long way from glossaries, but the possible use of this document to the Egyptian who wrote it is at least as interesting as its contents are valuable to posterity.

¹ With the whole of this and the preceding paragraph cf. ERMAN, *op. cit.*, *passim*, and particularly pp. 19, 20, and 23, where it will be seen that he considers the *Hood Papyrus* to have been a very popular "text-book" for the use of the scribe who was still undergoing his training—a text-book whose chief value lay in that it enlarged the student's vocabulary and taught him the correct spelling of rare words. The view expressed above, that the *new duplicate* was not an ordinary student's copy, is not inconsistent with the existence of the *Hood* as such; and in fact Prof. Erman's thesis that the young scribes to whom we owe the "Schülerhandschriften" were not as a rule beginners, but themselves junior officials, "devilling" for fully qualified scribes who had reached higher stages in the bureaucracy, enhances the possibility of a young scribal official making a practical memorandum for his own private use.

ORACLES IN ANCIENT EGYPT

BY AYLWARD M. BLACKMAN

II

With Plates xxxiv to xlii

This article deals with three ostraca and a papyrus, all in the British Museum. My sincere thanks are due to Dr. Hall for permitting me to publish them, and for allowing me to have photographs made of the ostraca.

I have had the advantage of discussing various points of difficulty in the translation of these texts with Professor Griffith and Professor Peet.

B.M. Ostrakon 5624.

(See Pls. xxxiv, xxxv and xl.)

A hieroglyphic transcription of this fine limestone ostrakon, together with a translation and commentary, has been published by Dr. ERMAN, *Zwei Aktenstücke aus der thebanischen Gräberstadt*, in *Sitzb. Preuss. Akad.*, 1910, 336 ff. A very inadequate facsimile is to be found in *Inscriptions in the Hieratic and Demotic Character from the Collection in the British Museum*, Pl. xiv. As can be seen from the photographs (Pl. xl), the text of the *verso*¹ is in excellent condition, whereas that of the *recto* is much rubbed and in places almost illegible. A careful examination of the original has enabled me to improve on certain of Dr. Erman's readings, and to fill up, I hope satisfactorily, all lacunae. On this account I have thought it advisable to republish the text in full. At its greatest length and width the ostrakon measures about 31 × 15 cm.

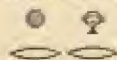
O, 1².

Recto, 1 *Thereafter*³, *I was standing building*⁴ and the (work)man⁵, Kha⁶nun, was at work in⁷ his⁸ tomb.

¹ In view of the sequence of events (see below, pp. 179 ff.) the side that Dr. Erman calls the *recto* must really be the *verso*, and *vice versa*.

² I have followed Dr. Erman in dividing the translation of this text into numbered sections; so, too, the text of the closely connected Berlin papyrus (see below, pp. 178 f.).


³ There must have been another ostrakon, now missing, bearing an account of events previous to that described in this paragraph. The reading [*hr hr*] *st tw-i* is, I think, almost certain. There is just room for



, and what is left of the following signs favours the reading $\text{𓆎} \text{𓆏} \text{𓆑} \text{𓆒}$.

⁴ The reading of these much defaced groups of signs $\text{𓆓} \text{𓆔}$ is certain in view of *Pap. Berlin*, 10496, *recto*, 9 = ERMAN, *op. cit.*, 331.

⁵ The same omission of *st* occurs again in *verso* 1.

⁶ Clearly .

⁷ *Tty.f* is certain.

O, 2.

First month of Shōmu, sixth day, he was on holiday and he found¹ the shaft² which is in it. And he went down into it with the w^{rt}-officer, Neferhotpe, while I was not there³.

O, 3.

Thereafter, on the seventh day of the first month of Shōmu, the chief workman, Khōns, made a discovery, as he sat drinking. Thereafter⁴, I was standing with Hori, son of Huinefer, and the workman, Bekenwerel, and I did not know where the shaft of my tomb was. And the scribe Amunnakht found the shaft(?)⁵, saying: "Come down, see the place which opens⁶ into⁷ the tomb of Kha^cnun."

O, 4.

Verso, 1

Year 7 of King Deserkheperre^c-Horemheb. On the day of induction which the workman⁸ Hai, my father, underwent, the majordomo of Nē, Tuthmosis, apportioned the places which were in the necropolis to the work-people⁹ [of]¹⁰ Pharaoh. And he (Tuthmosis) gave the tomb of Amun(mōse)¹¹ to Hai my father¹², as a charge, it being that Hel, my mother, was his own daughter¹³, and he had no male child, and his places were becoming forsaken.

O, 5.


Thereafter, in the year 21¹⁴, second month of Shōmu, first day, I stood before¹⁵ Amenōphis and said unto him: "Assign (me) to a tomb among the fathers," and he gave me the tomb of Hai by a writing¹⁶, and I began¹⁷ to work in it.

Pap. Berlin, 10496, also published by Dr. Erman, *op. cit.*, 331 foll., is concerned with the same people and events as the ostrakon. As it makes the ostrakon text much more intelligible, it will be as well to give a translation of it here, especially in view of the fact that no English rendering of it has yet appeared, and also that to many readers of the *Journal* the German publication will not be easily accessible.

¹ No lacuna as in ERMAN, *op. cit.*, 338. The surface of the stone is bad here and the scribe has not written on it. He began to write *pt*, but desisted after the first sign, and then began it again in the next line.

² See ERMAN, *op. cit.*, 340.

³ The reading is quite clear in the original; see Pl. xl.

⁴  is certain. Erman wrongly reads *in*.


⁵ The transcription on Pl. xxxiv is what the signs seem to read, though it is most unusual for *t* to be omitted after *xx* in N.K. hieratic. Have we here a mutilated writing of *th-pt*, which is a masculine word?

⁶ *Wn* is quite clear in the original.

⁷ Or "is open in the tomb," so that you can compare it with your own.

⁸ Sc. *rmṯ-lst*; see above, p. 176, note 5.


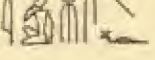
⁹ Nothing lost at end of line 2.

¹⁰ A bit flaked off here, carrying away the sign .

¹¹ See below, pp. 178 L (P, 6) = *Berlin Pap.*, 10496, v, 10, and p. 181.

¹² *I.e.*, my ancestor; see below, p. 181, and ERMAN, *op. cit.*, 341.

¹³ Erman emends *mṯ n-f* and renders: "Meine Mutter Hel, seine Tochter, sollte für ihn (?) gebären." But

 is surely just a writing of  (cf. *Brit. Mus. Pap.*, no. 10335, recto, 5 and 7 = *Journal*, xi, Pl. xxxvi).

¹⁴ Of the reign of Ramesses III, as is shown by the Berlin papyrus translated below; see too ERMAN, *op. cit.*, 330, 341.

¹⁵ The expression regularly used when appeal is made to a god for an oracular response (see e.g. *Journal*, xi, 351).

¹⁶ See below, p. 181.

¹⁷ Cf. *Pap. d'Orb.*, 4, 2-3, *in-kn mḥ r btk pḏy-ḥn rṯ-btk*.

P. 1.

Recto, 1 Year 21, first month of Shōmu, seventh day, (under) King Usima^cre^c-Miamūn (Ramesses III).
On this day

the chief workman Khons,
the scribe Wenennefer,
the scribe Amunnakht,
the representative Inḥorkha^c,
the representative Amunkha^c,

5 inspected the shaft which is in the tomb of the workman Kha^cnun, and they found that the shaft which is in the tomb of the workman Amenemōpe had been opened.

It was the scribe Amunnakht,

the representative Amunkha^c,
the representative Inḥorkha^c,
the w^crt-officer Neferhotpe,

who descended upon me(?)¹.

And the scribe of the vizier Amunnakht called to me, saying: "Open up north of the pillar that is in thy tomb; I see the mouth of thy shaft there." And I was standing
10 building² together with Hori the son of Huinefer and the workman Bekenwerel; and the chief workman Khons sat drinking upon the tomb of Kha^cnun.

P. 2.

Now when the place was inspected they found a painted coffin, that had not the name of
15 any person whatsoever inscribed upon it, and there was no...and no pot... There was no...
(lacuna of half a line in length) the land, placed beside it.

P. 3.

Now after...(lacuna of half a line) the scribe Akhpet sent, saying:...opened...(lacuna altogether of half a line) the scribe Amunnakht.... End of page missing.

P. 4.

Verso

(An entry at the bottom of the sheet.)

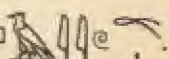
The sworn testimony(?)³ concerning the tomb pronounced by the watchman (Pe)nwennefer.

P. 5.

...by the Prince...[whose] power is death, if I..., he (the speaker)⁴ is to have his nose and
5 ears cut off and be placed upon...(?) in this⁵. In a different hand. The name of the Pharaoh was pronounced thereupon, and he repeated what he had said.

¹ Lü. "Who came to me with a coming down." As Erman points out, this does not mean that they descended into the tomb; it must be some technical, or perhaps merely an idiomatic, expression.

² He was repairing some part of the tomb-chapel, perhaps a wall of the fore-court.

³ Such, in view of the context, one would suppose to be the meaning of the word .

⁴ This sudden change from first to third person is characteristic of Egyptian oaths as reproduced in these late N.K. papyri (see SPIEGELBERG, *Studien*, 76 ff.).

P, 6.

In a different hand.

Year 24, first month of Shōmu, last day. The workman Amenemōpe son of Merire^c together with the workman Wen(en)nefer, son of Penamūn, made report to me on this day—the court in session (consisting of)

the chief workman Khons,
the chief workman Inḥorkha^c,
the scribe of the vizier Amunnakht,
the workman Hesisunebef,
the representative Amunkha^c—

10

saying: The dwelling of Amunmōse belongs to me. His (Amunmōse's) tomb—the charges (committed) to (Pa)bek belong to him (Amenemōpe) also. And he (Pabek) cast my lady¹ forth from the tomb of my father.

The court administered to him an oath by the sovereign, to wit: If I entered into this building(?)², then he³ is liable to an hundred blows and fifty wounds.

And I (the president of the court) proceeded also in like manner against Pabek before the court in session:

the chief workman Khons,
the chief workman (Inḥor)kha^c,
the scribe A[munnakh]t,
the w^crt-officer Neferḥotpe,

and very, very many witnesses.


As Dr. Erman has pointed out (*op. cit.*, 340), these two documents are not official documents, but mere excerpts from such, or else notes from which the permanent records were drawn up. The writers of these jottings knew, of course, exactly who every one was and all the facts of the case, whereas we are in a very different position. However, there are sufficient data at our disposal to permit us to reconstruct, with some degree of probability, the course of events with which these notes are concerned—events certain of which have considerable bearing on the subject of this series of articles.

In the twenty-first year of the reign of Ramesses III a certain Amenemōpe was in possession of a tomb known as "the tomb of Amunmōse," situated close to that belonging to his fellow workman Kha^cnun (P, 1; O, 1 and 3).

On the seventh day of the first summer month of that year the necropolis authorities inspected the shaft in the latter tomb. During this inspection one of the party, the chief workman Khons, as he sat on this tomb drinking, as we are told, observed that there were indications of the shaft in the adjoining tomb of Amenemōpe having also been opened (P, 1; O, 3).

On the previous day, so Amenemōpe would have us believe, Kha^cnun was on holiday, and, while thus unemployed, he had entered Amenemōpe's tomb along with the w^crt-officer Neferḥotpe, found out where the mouth of the shaft was situated, and gone down into it, in the owner's absence (O, 2).

¹ A deceased female member of his family; see ERMAN, *op. cit.*, 336, note 4.

² ; a ἀπαξ λεγόμενον.

³ See above, p. 178, note 4.

The necropolis officials, in view of this apparent irregularity, decided to inspect Amenemôpe's tomb also. All this time Amenemôpe, according to his own account, was standing building along with Hori, the son of Huinefer, and the workman Bekenwerel, and, when approached on the matter by the officials, asserted that he did not know where the shaft of his tomb was (O, 3). Thereupon the scribe of the vizier Amunnakht called out to him to clear away the debris north of the pillar in his tomb in order that he might see the mouth of his (Amenemôpe's) shaft there (P, 1); or, according to the other excerpt (O, 3), the scribe Amunnakht found the shaft (?), and said "Come down, see the place which opens into the tomb of Kha'num."

The examination of the burial-chamber itself, to which the shaft gave access, resulted in the officials finding only a coffin that bore no name, and no funerary equipment whatsoever (P, 2).

This naturally made the officials doubt Amenemôpe's right to possess the tomb, for it should have contained the coffins of deceased members of his family. The case had now, therefore, to be referred to an authority competent to deal with such matters, and the authority chosen in this instance was the deified Amenophis I, a divinity highly esteemed among the workers of the Theban necropolis¹.

Accordingly in the twenty-first year of the reign of Ramesses III, on the first day of the second month of Shômu, Amenemôpe "stood before Amenophis" and asked to be assigned a tomb; and he tells us that the god "gave me the tomb of Hai by a writing" (O, 5). The mutilated section (P, 3) is possibly, and the section containing the oath of Penwennefer (P, 5) is almost certainly, concerned with the enquiry held before the statue of Amenophis. Such oaths were regularly administered to both parties and to witnesses, not only in ordinary Egyptian civil trials, but also when a case was referred to a divinity².

Probably, then, it was not till after the guard Penwennefer, and no doubt others as well, including, of course, Amenemôpe himself, had been closely interrogated and had given testimony on pain of mutilation, that the writing establishing his claim was issued or rather, probably, acknowledged by the god.

¹ See above, p. 177, note 7.

² Along with Amenophis I was also venerated his mother Queen Nefertiri (see ERMAN, *Religion*², 92). Amenophis had become a god with a temple and an organised cult. Thus two British Museum papyri, nos. 10417, *recto*, 1 (see below, p. 184) and 10053, *verso*, 4, 19, make mention of a "prophet," *hm-ntr*, of Amenophis, and the latter speaks of his temple also. There seem to have been at least two cult-forms of Amenophis, postulating two temples, Amenophis of the Court, *n pt whi* (*Pap. Abbot*, 2, 3-4, and *Brit. Mus. Pap.*, 10053, *loc. cit.*; see also 10417, *verso*, 4), and Amenophis of the Garden, *n pt kmw* (*Pap. Abbot*, 2, 3-4). Is Amenophis the Lord of the Town, *pt nb pt dmi* (see below, p. 181; also *Cairo Ostrakon*, 25234), yet another distinct form of the god, with cultus-statue and temple, or just a general designation like "the god," or "the great god" (ERMANN, *Sitzungsberichte*, 340)?

As Dr. ERMAN points out (*ibid.*), Amenophis, like any other Egyptian divinity, has his regularly recurring festivals. The following are known:

First month of Akhet, 29th and 30th.

First month of Prôyet, a "great festival" lasting four days and including, and possibly beginning on, the 28th.

Third month of Prôyet; there was possibly a festival on the 15th (see ERMAN, *op. cit.*, 345[8]), which must have given the name *np̄m̄gōtē*, Phamenoth, to the month.

Third month of Shômu, 11th and 13th.

For the references to *Brit. Mus. Pap.* 10053, and *Pap. Abbot*, I am indebted to Professor Peet.

³ See *B.M. Papyrus*, 10335, *verso*, 1 = *Journal*, XI, Pl. xxxvii, 251.

⁴ See *Journal*, XI, 254; also this *Journal*, below, p. 182.

What, it may well be asked at this juncture, is meant by "he gave me the tomb of Hai by a writing"? Probably the same method of procedure was adopted in this case as that described in the famous inscription of Paynodem¹, that is to say two papers were placed in succession before the god's image, one confirming Amenemōpe's claim to the tomb and the other denying it. We gather from the inscription in question that the god indicated which of the two papers was acceptable to him by nodding².

With regard to the term "the tomb of Hai"—Amenemōpe claimed to be a descendant of Hai, who lived in the reign of Horemheb, through his only child and daughter Hel, the words father and mother meaning, as often in Egyptian, just ancestor and ancestress (O, 4).

That the tomb of Hai was the tomb in dispute is shown by O, 4, where we are told that to Hai was assigned by the majordomo of Nē, Tuthmosis, the "tomb of Amūn," without doubt a slip of the scribe's pen for Amunmōse (see P, 6).

It is interesting to note that, despite the god's decision in his favour, Amenemōpe's claim to the tomb could still be regarded as a matter for dispute and further litigation³. P, 6, which is dated three years later, the twenty-fourth year of the reign of Ramesses III, last day of the first month of Shōun, is the statement of a necropolis official, evidently the president of the necropolis court, to the effect that on that day Amenemōpe laid claim before that court (not before Amenophis this time) to the dwelling of Amunmōse and his tomb, and also to the "charges to Pabek." He accuses Pabek of ejecting his "lady" (a deceased female member of Amenemōpe's family) from the tomb of his father. Evidently Pabek had disputed Amenemōpe's right to this tomb and had thrown out the mummy of this woman to make room for a dead member of his own family.

An oath was administered to the plaintiff, who of course swore, on pain of being given one hundred blows and fifty wounds, that he had never been inside the tomb, and a similar oath was administered to the defendant, in the presence of the court and "very, very many witnesses." Unfortunately the document does not inform us as to the result of this judicial enquiry.

B.M. Ostrakon 5625.

(See Pls. xxxv, xxxvi and xli.)

This limestone ostrakon, a not satisfactory drawing of which is published in *Inscr. in the Hieratic and Demotic Character*, Pl. xii, measures at its greatest length and width about 16.5 × 16 cm. It dates from the fourth year of the reign of Ramesses IV⁴.

Recto, 1 Year 4, fourth month of Akhet, last day. On this day the workman Kenna, son of Siwadet, reported to King Amenōphis the Lord of the Town, saying: "Help me, my good
5 lord! I am he who built the dwelling of the workman Pekharu, when it had been ruined. Now behold, the workman Mersekhmet, son of Menna, doth not make it possible for (me) to dwell in it, saying: 'It is the god who said to me: Divide it with thee,' said he⁵, albeit he did not build⁶ therein with me....

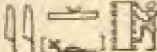
¹ BREASTED, *Ancient Records*, IV, §§ 670 ff.

² *Op. cit.*, § 672 (line 17 of inscription).

³ Cf. on this point *Journal*, XI, 255.

⁴ See ERMAN, *Sitzungsberichte*, 344.



⁵ Most of the tail of the *f* in *hrf* is written over the edge, on the thickness of the ostrakon.

⁶ The reading □@  is certain; see Pl. xxxvi.

Verso, 1divide," so said he saying to(?)¹ the god. Then(?)² the scribe of the necropolis, Horisheri(?)³, repeated (it) to him (the god). And he (the god) said: "Give the dwelling to
 5 Kenna its owner again; it belongeth to him by a charge of Pharaoh, and no one shall divide it." So he said saying, namely the god, (in) his presence, in the presence of the chief workman Nekhemmut, the chief workman Inhorkha⁴w, the scribe Hori, the carriers⁵ of the god, and all the work people, in the doorway⁶ of the tomb of the chief workman Kaha. And he uttered an oath, saying: "As Amūn endureth, as the Prince, whose power is death, endureth, Pharaoh, my lord, if I go back to contradict it⁷, I am liable to one hundred⁸ blows and to be deprived of (my) share⁹."

This text, like the preceding one, is a record of an appeal to Amenophis for a legal decision, in this instance with regard to a house.





The plaintiff, Kenna, asserts that he is being wrongfully prevented from taking up his residence in a dwelling, known as "the house of Pekharu," which had fallen into ruin, and which he (Kenna) had rebuilt. The defendant, a certain Mersekhmet, claimed to have consulted "the god," i.e., Amenophis, who, so he said, asserted that he and Kenna were to share the house, although Mersekhmet, so it is stated, had had nothing to do with the work of rebuilding it.

Unfortunately the greater part of *recto* 9, which follows immediately after the alleged oracle of Amenophis in favour of Mersekhmet, is lost, owing to a corner of the ostrakon being broken off, and I can make nothing of the end of the line; this break also entails the loss of nearly the whole of the first half of *verso* 1. Was what is lost, or remains unintelligible, in these two lines a continuation of Kenna's address to the god, his actual evidence in support of his claim, or was it partly or wholly a reply of the god? If the latter, then *in-f dd n p' ntr* must be rendered "so said he saying, namely the god,"  being written, as it well might be, instead of , which is employed where the expression occurs in l. 5 below. But on the whole I favour the other alternative and have accordingly rendered the words "so said he saying to the god."


When Kenna had finished speaking, the scribe of the necropolis, Horisheri, repeated his claim to the god, whose reply confirmed it. If the suggestion that *recto* 9 and *verso* 1 contain Kenna's evidence is correct, then the oath rendering himself liable to one hundred blows and deprivation of his "share," if he should go back on what he had said, must also be his.

The oracle was, we are told, delivered in "his (i.e., Kenna's) presence" and in the presence of a number of persons, including the god's carriers, in the doorway of the tomb of the chief workman Kaha. The mention, in this connection, of the god's carriers and of

¹ See below.

² The reading    is fairly certain. Dr. Gardiner has suggested to me that the traces of signs that follow are to be restored .

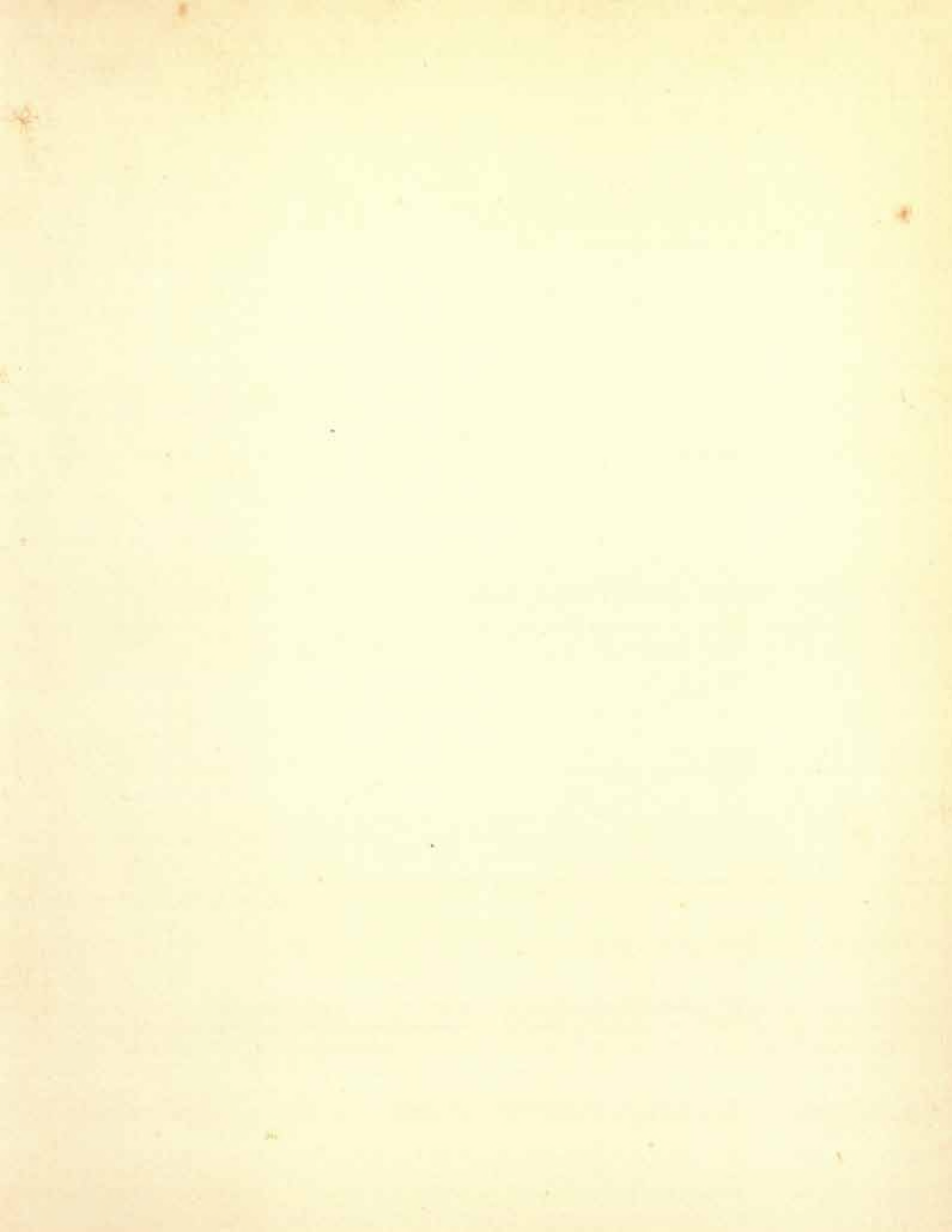
³ *Ty fyt*, a fem. collective, "the carrying-personnel."

⁴ For the writing  see SPIEGELBERG, *Studien*, 23.

⁵ For this meaning of *mdw n* see PIEHL, *Zeitschr. f. äg. Spr.*, XXIX, 49 ff.

⁶ See SPIEGELBERG, *Studien*, 19 f., 28; *Anast.*, III, 6, 10. The reading of the end of the line is certain.

⁷ In the tombs distributed among the necropolis workers!



the entrance to a tomb, shows that Kenna's, like Amenemuia's¹, appeal was made while the god's cultus-image was being carried in procession, and that the procession traversed part of the actual necropolis. Moreover "all the work-people" would only be so gathered together on some such occasion as a general festival. Evidently, therefore, the last day of the fourth month of Akhet must be added to the list of dates of Amenophis' festivals on p. 180.

B.M. Ostrakon 5637.

(See Pls. xxxvii and xlii.)

A limestone flake of irregular shape, measuring at its greatest length and width about 12 × 11 cm. Published in *Inscr. in the Hieratic and Demotic Character*, Pl. xv. For the date of this ostrakon see note 3 on this page.

Recto, 1 Details² of every theft perpetrated against me by the workman Nekhemmut³. They went to the house⁴, and they took two great loaves and three assorted loaves, and they poured out
5 my unguent (mrh), and they opened my magazine containing spelt, and they took away one šdyt⁵ of lead⁶, and they went to the dock warehouse, and they took the half of the kyllestis-bread of the day before, and they poured out the oil (nhh).

Verso, 1 Third month of Shōmu, thirteenth day, on the occasion of the procession of King Amen-
ophis:—They went to the storehouse, and they took three great loaves, eight scb-loaves, and one
inr⁷ of rḥs-cakes⁸, and they drew off one indkt⁹-measure of beer which was upon the water¹⁰,
5 while I was in the house of my father. Act, my lord, so as to restore me all my loss!

My reasons for publishing this ostrakon here are the fact that it gives the date of one of Amenophis' festivals, the solemnities marking which included a procession, and the possibility that it is an actual petition that was laid before the god's cultus-image; this being suggested by the words in verso lines 5 f., "Act, my lord, so as to restore me all my loss!" If it were a letter or petition to some official, his name and titles would surely appear at the beginning of it.


Evidently the plaintiff was a trader, with a warehouse on the quay of Western Thebes, and possibly also a place of business in Western Thebes itself. His shop (?) and warehouse had already been robbed by Nekhemmut and his confederates. Then on the occasion of a festival of Amenophis, when all the inhabitants of Western Thebes, the plaintiff among them, were on holiday, watching, or taking part in, the procession of this popular divinity.

¹ *Journal*, xi, 250, 253.


² See Koller, 5, 7 = *Anast.*, iv, 13, 10.

³ If he is the same person as the Nekhemmut of *Ostr.* 5625, this document must date from before the fourth year of the reign of Ramesses IV (see above, p. 181, note 4), as there he is entitled "chief workman," whereas here he is only a "workman."

⁴ Does "house" here mean "place of business," "shop"? Cf. the meaning "commercial house," "firm," in *Wenamün*, 2, 2; *Journal*, xi, 288, note 13.

⁵ The determinatives  suggest "lump" or "mass"; cf.  prob. = Copt. *uḡote* "dough."

⁶ *Dht(y)*, Copt. *ṭaḡṭ*.

⁷ *Inr* is a ἀπαξ λεγόμενον; see BURCHARDT, *Ägypten-Äthiopische Fremdwörter*, 73. It is possibly a word for some kind of receptacle; in *Anast.*, iv, 14, 3, mention is made of "one hundred baskets of rḥs-cakes." For the doubtful determinative, which is perhaps to be read , see Pl. xxxvii, footnote 1.

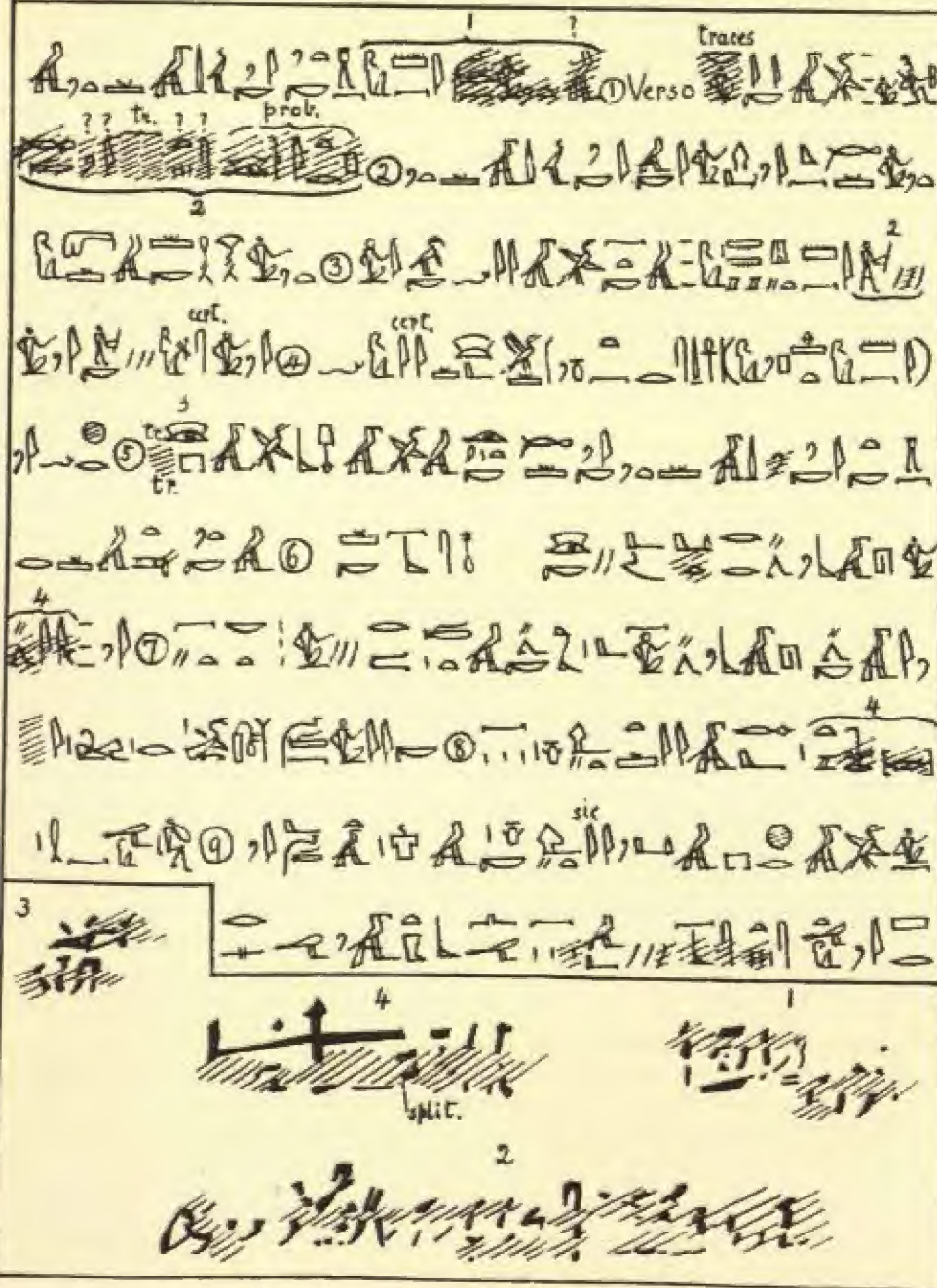
⁸ See BURCHARDT, *op. cit.*, 629.

⁹ *Op. cit.*, 552. It is also associated with beer in *Anast.*, iv, 12, 11.

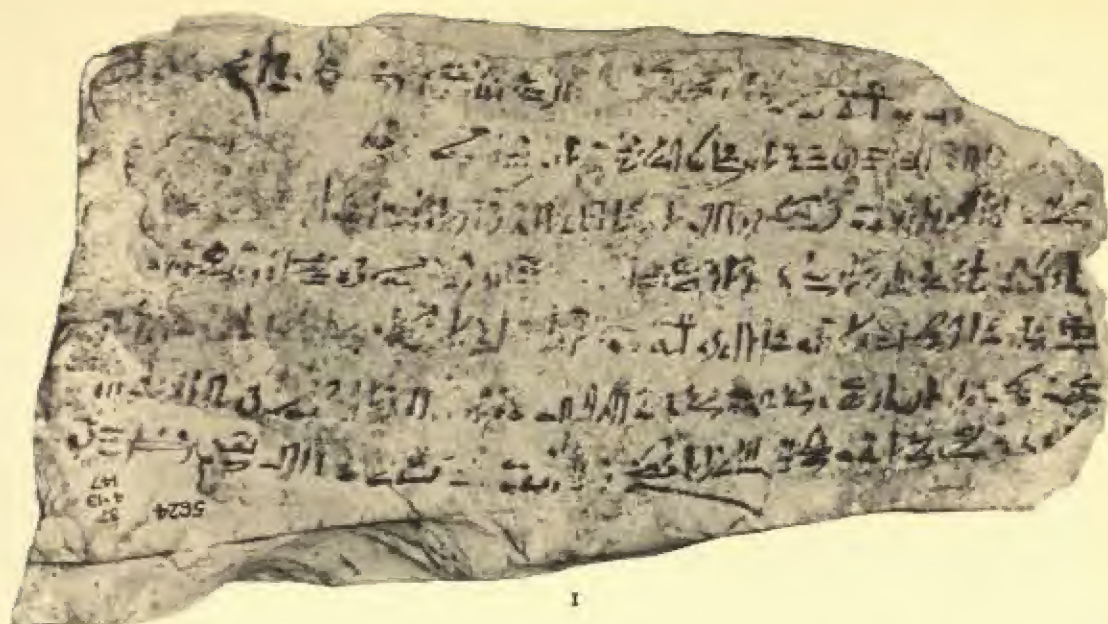
¹⁰ Does this mean that the jars containing beer were placed on water to keep it cool, or that it was still in process of being made?



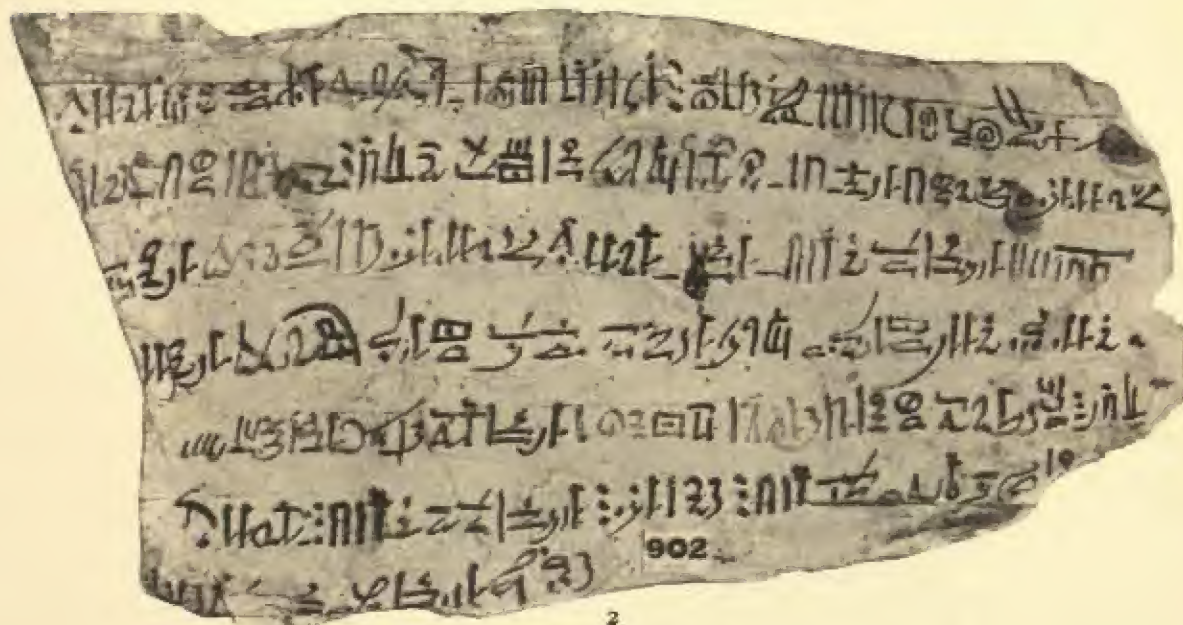
B.M. PAPYRUS. 10417. RECTO, 12- VERSO, END.



B.M. Papyrus 10,417.



1



2

B.M. Ostrakon 5624.

1. Recto. 2. Verso.



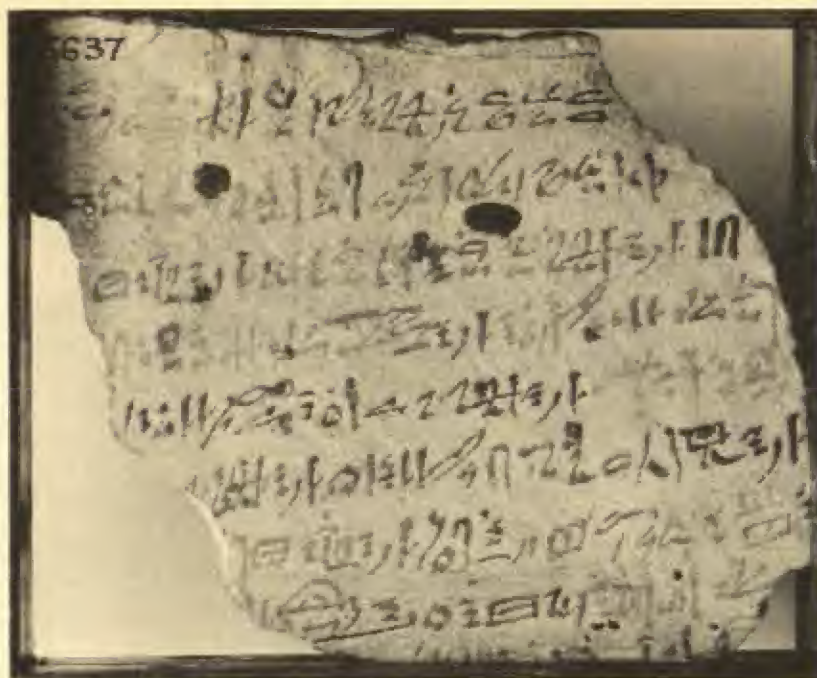
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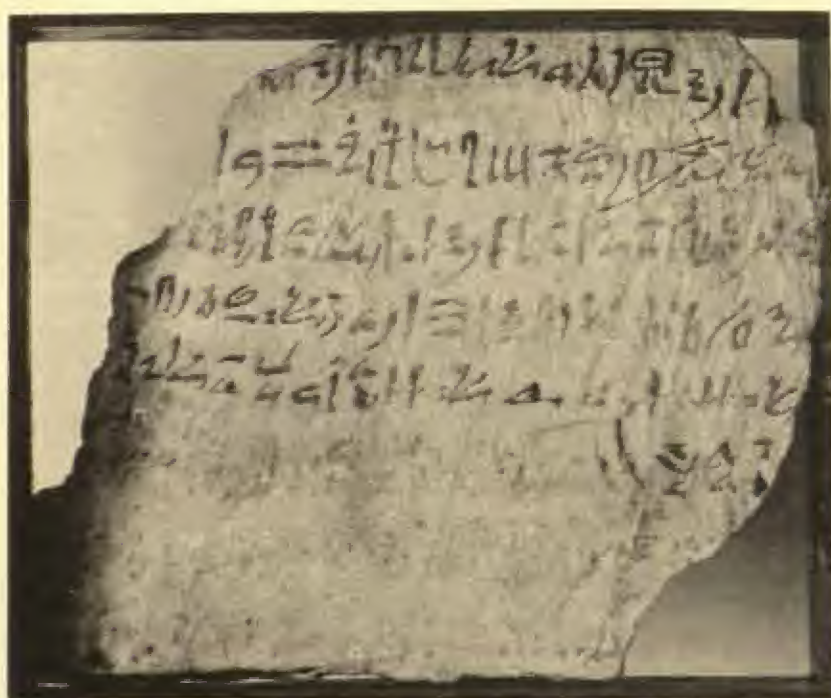
2

B.M. Ostrakon 5625.

1. Recto. 2. Verso.



1



2

B.M. Ostrakon 5637.

1. Recto. 2. Verso.

I send unto thee to let thee know. Be thine health good! And cease not to send news unto me as to how thou farest by the hand of any persons that come to the south¹, that our heart may be patient (1)².


Postscript for the scribe of the necropolis Thareri:—Be not anxious concerning the daughter of Hemsheri. She is in health. There is no wrong (wrought) against her.

This letter belongs to a mass of Twenty-first Dynasty correspondence, which must have comprised one single "find," but is now scattered about the museums of Europe. A large number of these letters have been published by Spiegelberg in his *Correspondances des rois-prêtres*, which includes four letters written by the scribe Tuthmosis, the writer of the letter with which we are here concerned. In them and other letters contained in that publication occur the names of all the people mentioned in this letter, except that of the prophet Amenophis to whom it is addressed, and who, in view of the request in *verso*, lines 6 and 7, must have been in the Delta or at the north-eastern frontier. Perhaps he was away from Thebes on business connected with temple property³, or, as Professor Griffith has suggested to me, was on a military expedition, carrying some sacred emblem, possibly a portable image of Amenophis. The mention of the "General" distinctly favours Professor Griffith's suggestion.

The General of *recto*, lines 6 and 12 is Prince Pi'onkh, the son of King Hrihōr⁴. It might here be pointed out, in respect of "Shedemtēi, and the boys" (*recto*, lines 9 and 10), that Tuthmosis, when himself away from home, says in a letter to the necropolis guard Karē: "Look after Shedemtēi and her little boys so as not to suffer any one to wrong them⁵." Again, in a letter to the scribes Butehaimūn and Shedemtēi he speaks of "this daughter of Hemsheri" (*cf.* our letter, *verso*, lines 8 and 9), and further on in the same letter he says: "Do not suffer Hemsheri to be troubled⁶."

The reason for the publication of the letter in this article is the statement in *verso*, lines 3-5, *I place thee in front of Amenophis at every procession of his. "I will protect thee, I will bring thee back safe, and thou shalt fill thine eye with the Court," so he saith.* These words can only mean that whenever the god's cultus-image was carried in procession at his festivals, Tuthmosis somehow or other brought his absent friend to the notice of the god, whose prophet he was, and that the god made reply, by the mouth of one of the attendant functionaries⁷. It has already been pointed out (p. 180) that "Amenophis of the Court" was the name of a special form of the god. Evidently it was to that particular cultus-statue that Tuthmosis' friend was attached as prophet.

It would be interesting to know what method was employed in presenting this appeal to the god. The use of the word *with* "lay down" suggests that Tuthmosis placed some object before the image, rather than that he merely addressed the god in words. Perhaps he wrote a short petition containing his friend's name on an ostrakon or scrap of papyrus, and this was presented to the god on the occasion of a halt being made during the festival procession. It is possible that this was a regular custom and that several such petitions would have been presented together (see *e.g.*, above p. 183, and *Journal*, xi, 253).

¹ There is no trace left of  between *ly* and *rayt*, but there is just room for it in the lacuna.

² So Professor Griffith thinks *ʿly hrt-n* should be rendered, or else possibly "that our heart may be happy."

³ *Cf. Anat.*, iv, 8. 10-7. 9.

⁴ SPIEGELBERG, *op. cit.*, 13 ff.

⁵ *Op. cit.*, 31 f.

⁶ *Op. cit.*, 41 (*verso* 2), 42 (*verso* 11 f.).

⁷ See *Journal*, xi, 254 f.

THE NEW CUNEIFORM VOCABULARY OF EGYPTIAN WORDS

BY W. F. ALBRIGHT

In the *Journal*, XI, 230-9, Sidney Smith and C. J. Gadd have published a very remarkable tablet found six years ago at Tell el-'Amarnah. This tablet contains the first cuneiform list of Egyptian words ever found, and adds Egyptian to the long list of languages—Sumerian, Accadian, Susian, Persian, Cossaeon, Chaldian, Cappadocian (Nasi), Hittite (Hatte), Luyya, Bala, Hurri, Canaanite, Aramaean, etc.—already known to be written in the Mesopotamian script. Thanks to the list of numerals it contains, we have new and very important material for the recovery of the Egyptian vocalization of the New Empire, supplementing the transcriptions of names and words already found in the letters from 'Amarnah and Boghazkeui. In the future the student of Egyptian philology must master the essentials of cuneiform phonology.

One hardly needs to say that the work of interpretation has been remarkably well done, considering the difficulties of the task. The few gleanings would be singularly unimportant, were it not for the value of the text to the student of Egyptian vocalization. To him it is the most encouraging discovery of recent years, suggesting that we may yet be able to recover the essentials of Old Egyptian pronunciation, so that it will no longer be necessary to resort to the current Egyptological *pis aller*, or to adopt Hellenistic and pseudo-Coptic forms as our guide. The question of early Egyptian vocalization has been revolutionized by Sethe's brilliant paper on *Die Vokalisation des Ägyptischen*, in the *Zeitschr. der Deutschen Morgenländischen Gesellschaft*, 1923, 145-207¹. The present writer had reached almost identical results in a monograph prepared in 1919 for the *Beiträge zur Assyriologie*, which has suspended publication since the war². An abstract of his conclusions was then published in the *Rec. de Trav.* 1923, 64-70, regarding which Sethe commented in the *Nachschrift* to his monograph (p. 207): "Der in jeder Beziehung sehr bemerkenswerte Aufsatz berührt sich vielfach in geradezu überraschender Weise mit dem was oben vorgetragen ist, ohne sich natürlich ganz damit zu decken." Sethe's results are so rigorously scientific, and the demonstration is so convincing that only those who know nothing of Egyptian or of philological method can doubt their essential correctness. It is gratifying to have this new link between Egyptian and the other Semitic languages. Egyptian is as truly a Semitic (or Hamito-Semitic) language as is Amharic, though like the latter it is by no means unlikely that non-Semitic elements will eventually be demonstrated. But Egyptian stands apart from the other Semitic tongues, holding to them much the same relation that Breton does to the Romance sisters, though all are descended from the same Italo-Celtic branch of the Indo-European stock³.

¹ Cf. the review by GARDINER, *Journal*, XI, 123-4.

² Cf. the writer, *Journal*, VI, 89, D. 4.

³ Cf. the writer, *American Journal of Semitic Languages* (cited as *A.J.S.L.*), XXXIV (1918), 81 ff.

After the excellent work of Ranke on the cuneiform transcriptions of Egyptian words hitherto found¹, it is hardly necessary to explain the nature of the cuneiform script to Egyptologists. Cuneiform is not nearly so full and exact in its reproduction of the Semitic consonants as is Egyptian, since it was primarily the script of a non-Semitic people, which did not possess any of the peculiar Semitic sounds, while Egyptian, being itself a Semitic tongue, preserved many of them. On the other hand, neither Egyptian nor the derived Western Semitic alphabet represented the vowels, so the only source for our knowledge of the vowels before the middle of the first millennium B.C. is cuneiform transcription. The cuneiform representation of vowels is not perfect, since it indicates only *a, i, u, e* (sometimes, but not always, nor always consistently), but possesses no *o*. This lack is probably due to the fact that the Babylonians and Assyrians, who undoubtedly possessed *o*, made little distinction in practise between *o* and *u*, like the modern Arabs. It was only in Mitannian cuneiform that a special character is sometimes used to denote *o*.

The script of our tablet is Assyro-Mitannian, as seen by the editors. The phonetic peculiarities agree with this conclusion, since Eg. *s* appears as *š*, while Eg. *š* is written apparently as *s*. The value assigned these letters is the Babylonian pronunciation, used by cuneiformists for convenience, while the Assyrians pronounced Babylonian *š* as *s*, *s* as *š*. We now know that the Assyrian dialect preserved the original Accadian values of the sibilants, which were closely related to the original Semitic values². In Babylonian, on the other hand, the values of the sibilants were reversed, as in Phoenician; no fact in Semitic phonology is more certain than this³. There can be no question of a different pronunciation of the Egyptian *s* and *š* than that which is accepted by all Egyptian philologists. The appearance of the Egyptian hypocoristicon *Môse* as *Môšê* in Hebrew has a different explanation⁴.

The character *PI* has the value *pi* in our text, contrary to the usual practice in the 'Amarnah Tablets. In Middle Babylonian *PI* was usually read *wa, we*, etc., but in Middle Assyrian (Ašur-uballit inscriptions, etc.) *PI* had commonly the same value *pi* as it possessed in later times. This is a very important point, which the editors have correctly seen. On the other hand, there is no justification for the view that *m* may represent here "both the ordinary nasalized labial, and a pure labial without nasalization." In the Babylonian dialect, as perhaps already in Sumerian, *m* seems to have been pronounced as a bilabial, rather than as a simple labial, and appeared to the Aramaeans as *w* (in the intervocalic position)⁵. The consonants *m* and *w* interchange frequently in all periods. In the modern dialect of Baghdād the same peculiarity often appears. In the Assyrian dialect, on the other hand, there is no trace of this phenomenon, as we know, e.g. from the Aramaic transcriptions of the eighth and seventh centuries B.C.⁶.

¹ See especially RANKE, *Keilschriftliches Material zur altägyptischen Vokalisation*, Berlin, 1910, as well as several papers in recent volumes of *A.Z.*, especially 56, 69-75, and 58, 132 ff.

² Cf. the table of sibilants given in the *Journal of the Palestine Oriental Society*, II, 124, n. 3. For the principles involved cf. provisionally WORRELL, *J.P.O.S.*, I, 19.

³ The editors seem to doubt the certainty of this phonetic law. The material collected by TALLQVIST, *Assyrian Personal Names*, 18 f., and DELAPORTE, *Épigraphes araméennes*, 16 f., is conclusive, and might be greatly extended by utilizing the abundant additional material from recent publications of inscriptions and papyri. Cf. also YLVIÄKÄR, *Leipziger Semitistische Studien*, v, 6, 8.

⁴ See *A.J.S.L.*, xli, 84, n. 1.

⁵ See DELAPORTE, *op. cit.*, 17.

⁶ Cf. the material given by TALLQVIST and DELAPORTE. Interchange between *m* and *w* is unknown in the 'Amarnah Tablets, as may be seen by a rapid perusal of EBELING's glossary to the KNUDTZON edition, or of the relevant sections in BÖHL's grammar.

The first five lines of the obverse are very obscure. They appear to read as follows:

1. *ma-ah-pi šarra[]bi-n[a].*
2. *nam-zu¹-u ka²-la-mu.*
3. *ma-ah-tu-lu a-hi-a-tu^m.*
4. *pi-ta-aš ni-mu-u ah-ta³ qa[]di.*
5. *pi-še-pa ma-zu³-u šak(rēš)-la-[].*

Unfortunately only two of the Assyrian words are clear, *kalāmu* and *ahīdtu^m*, meaning respectively "totality" and "foreign regions," or the like, but the corresponding Egyptian words are quite refractory. Of the Egyptian words one is tempted to explain *namzū* as *nī (n) mḏj-wt*, "these letters (rolls)," while *pi-še-pa ma-zu-u* might mean *pī sp (n) mḏj-wt*, "the rest of the letters." The suggestions of the editors, *ma'-pi = m ḫpw-t (wḫw-t)*, and *pi-ta-aš ni mu-u'-da = pds n mḏ-wḏ*, which may mean "a kind of box of a species of small animal," are perhaps equally possible, but are phonetically objectionable. Moreover, the word *mḏ-wḏ* is archaic. It is, however, likely that there is some rational connexion between the words given in the first five lines; perhaps they form a sentence, either independently of the Assyrian words, or actually in combination with them. What the rational connexion is escapes me.

Line 6 is puzzling, though it seems to have some connexion with what follows. From line 7 on we are dealing with the numerals:

7. <i>ši-na ah mu⁴</i>	II	Eg. <i>šnw⁵</i> ,	Coptic	<i>snāw.</i>
8. <i>ha-am-tu^m-šu-nu⁶ ah</i>	III	" <i>hmtw</i>	"	<i>šōmt.</i>
9. <i>ip-ta(?) -u-ša-nu ah</i>	IV	" <i>fdw</i>	"	<i>fdōw.</i>
10. <i>ti-u-šu-nu ah</i>	V	" <i>dw</i>	"	<i>tdōw.</i>
11. <i>ša-u(-šu-nu ah)</i>	VI	" <i>ššw</i>	"	<i>šōw.</i>
12. <i>šap-ha-šu-nu ah</i>	VII	" <i>šfhw</i>	"	<i>šāšf.</i>
13. <i>ha-ma-an-šu-nu ah</i>	VIII	" <i>hmnw</i>	"	<i>šmān.</i>
14. <i>pi-ši-id(-šu-nu ah)</i>	IX	" <i>psdw</i>	"	<i>psūt.</i>
15. <i>mu-tu(-šu-nu ah)</i>	X	" <i>mdw</i>	"	<i>mēt.</i>

¹ The character in question, which the editors left doubtful, can only be *zu*, unless we suppose that it is a special character coined for use in transcribing Egyptian.

² The traces support this reading, which is the only one possible if the word is really Accadian.

³ Despite the additional wedge, this character is also probably *zu*. An identification with *su* is perhaps possible, but the form of this sign in the reverse, line 8, is quite distinct.

⁴ The syllables *ah* and *mu*, which are added to the numeral, cannot represent secondary forms, such as the ordinal. It may be suggested that *ah* is *iḥ*, Coptic *ax*, in which case it should perhaps be transcribed *iḥ* (AH = *aḥ*, *iḥ*, *uḥ*). *Mu* may then be the alternative (older) interrogative *m*. "What?" added to the numeral, suggests that the tablet is part of a manual for instructing Egyptians in cuneiform, prepared by an Assyro-Mitannian teacher.

⁵ For the Semitic origin of the Egyptian consonantal forms see *A.J.S.L.*, xxxiv, 90 ff. The whole question of the numerals is thoroughly treated by Sethe in his monograph *Ueber Zahlen und Zahlworten bei den alten Aegyptern*, Strassburg, 1916. For a characteristic discussion of the subject from the old anti-Semitic point of view, cf. Jéquier in *Recueil d'études égyptologiques* (Champollion anniversary volume), Paris, 1922, 467 ff.

⁶ Probably Eg. *hmtšn*, "three of them." If this is right, we obtain the vocalization *sun* for the pronominal suffix of the third person plural, corresponding to Old Accadian *sunu*, later Babylonian *šunu*. This is then another case where the knowledge of the vocalization enables us to establish the Semitic character of a form more convincingly.

Every one of these forms is in perfect accord with the phonological principles discovered independently by Professor Sethe and the writer. It is seldom that philological reasoning brings its tangible confirmation so quickly. As stated by the writer (*Rec. de Trav.* XL, 66) below :

"After 1300 (B.C.) the following transformations took place,

In a closed accented syllable, $\tilde{a} > \tilde{o}$, $\tilde{t} > \tilde{d}$, $\tilde{u} > \tilde{e}$.

In an open accented syllable, $\tilde{a} > \tilde{o}$, $\tilde{t} = \tilde{d}$, $\tilde{u} > \tilde{e}$."

The numeral "two" in the 'Amarnah period was *šinēw* from the Semitic base $\theta \acute{e} n$ = Arabic *ibn(dni)*, Assy. *šin(d)*; the long \acute{e} is due to its presence in an accented open syllable (Sethe, *passim*; Albright, rule 1). In later Egyptian the dual form *šinwy* (fem. *šnty*) prevailed, and Coptic *snōw* is metathesis for $*\acute{s}n\acute{w} < *šinwe(y)$; *ibid.*, 68 above. The numeral "three," pronounced *hāmītēw* (the overhanging *m* was not pronounced, and does not = *w*) became *šōmt*, because short *a* in a closed accented syllable becomes \tilde{o} , while final $\acute{e}w$ is regularly dropped. "Four," earlier (*i*)*fdw*, pronounced in the fourteenth century approximately (*i*)*fādu*, would naturally become *fōw* in Coptic. The following "five" has not changed its vocalization at all, just as we should expect, since according to the rule a *fūēw*, or the like, would become *tūw*. In the case of "six," *sāu* has become *sōw*; the original Semitic form *sāds* became *sāisēw* and by haplology *sāw*. *Šapha*, "seven," stands for *šāfhēw* from original Semitic *sāb*^c; in the Coptic form there has been transposition and change of \tilde{h} to \tilde{s} , but the vowel \tilde{a} has been preserved under the influence of the laryngeal, as regularly in Egyptian and other Semitic tongues. The word for "eight," *hamān* = *hemān(ēw)*, has become *šmān*, since the *m* changes \tilde{o} to \tilde{a} in Sahidic; for the original Semitic form *hamān* and the reason for the change of the initial consonant see the discussion in *A.J.S.L.*, XXXIV, 91 ff. The following "nine," *pišid*, stands for *pesid(ew)*, or perhaps for *pesit(ew)*. The original form of the word was *tis*^c, which was modified to *tisēw* (*ibid.*), whence by dissimilation *pišēw* and by vocalic transposition, which is common in Egyptian, *pišdēw*, which became *pišdēw* by lengthening of the short accented vowel in an open syllable. Finally *mutu*, "ten," represents a pronunciation *mūtēw*, which became *mēt* in Coptic. This change of \tilde{a} to \tilde{e} is also illustrated by *Tīlā* > *Sēlē* (*Journal*, x, 6-8), as well as by Heb. *kinānōr*, "harp," whence Eg. *kenār* and Coptic *cinēr* (to be discussed in the *Zeitschr. f. äg. Spr.*).

The complete agreement of the preceding forms with the phonetic principles already worked out is certainly the most tangible corroboration that could possibly be expected. Nor is any contradiction brought by the reverse of the tablet, which has been well interpreted by Messrs. Smith and Gadd. In lines 7 and 11 we should probably read *zu-hu-lu* and *ha-zu-pu*, but the explanation of these words eludes me. One has only to note the large number of Coptic words which still remain without an Egyptian etymology to realize that our knowledge of the ancient Egyptian vocabulary is extremely defective. The identifications made by the editors are mostly plausible: *pu-us-bi-u* = Coptic *pesbē*, "the door" (Eg. *peš sbāš*); *na-ab-na-su* = *nā bnšw* (note Assy. *s* = Eg. \tilde{s}); *pahatu*^m = *pā h'ty*. The word *daspu*, "throne," is probably not *tā sp-t*, but rather *tā lšb-t*, since *lšb-t* is exactly equivalent to *kussū*. The form *daspu* for *tašbu*, which we should expect, may be credited to the Mitannian scribe, whose ear was not quite trained to the difference between voiced and voiceless stops. As for the *s* instead of \tilde{s} , it is precisely in connexion with immediately following or preceding *b*, *p*, and *k* that *s* frequently interchanges with \tilde{s} both in Assyrian and Babylonian. The word *pi-pa-ru* in line 5 cannot mean *pā pr*, "the house," then pronounced approximately *pē-pāy* (Coptic $*pēi$), but I cannot explain it.

Let us hope that the continuation of excavations at Tell el-'Amarnah will be as successful in the discovery of cuneiform tablets as the past work. If we are to be blessed in the future by such unexpected discoveries as the *šar tamhari* epic, a romance built around the wars of Sargon of Accad in Cappadocia, the remarkable collection of six tablets recently published by Thureau-Dangin, which are of fundamental importance for our knowledge of Palestine in the 'Amarnah Age, and this new cuneiform vocabulary of Egyptian words, it would be a sin against the spirit of archaeology not to continue the work until its completion.

THE TEACHING OF AMENOPHIS THE SON OF KANAKHT. PAPYRUS B.M. 10474

By F. LL. GRIFFITH

The Teaching of this Amenophis is one of the numerous treasures which Sir Ernest Budge brought home for the British Museum in 1888 from his first mission to Egypt. A page of it is shown in his *By Nile and Tigris* published in 1920¹, and probably the only earlier reference to it in print was by the late Mr. Lepage Renouf very soon after its acquisition². In 1922 however Sir Ernest gave an account of the text in the *Recueil Champollion* with large extracts in transcription and translation³. In the following year appeared the official publication in the Second Series of *Facsimiles of Egyptian Hieratic Papyri in the British Museum*, where the whole of the text is photographed, transcribed into hieroglyphs and translated⁴. After another year, in August 1924, a transcription and translation, substantially the same as that accompanying the facsimile, was issued by the same scholar in a separate work⁵ containing also renderings of other proverbial writings that have come down to us from Ancient Egypt. In these two publications Sir Ernest Budge drew attention to the resemblance of some passages to sentences in the Book of Proverbs.

Meanwhile, about a year after the publication of the facsimile Dr. H. O. Lange, formerly Librarian of the Royal Library at Copenhagen, gave a lecture on the text with a new translation into Danish⁶, utilizing a second text of several chapters from a wooden writing tablet copied by Dr. Gardiner at Turin. Professor Erman of Berlin thereupon printed a revision of Lange's version in German⁷, and at the same time communicated to the Prussian Academy a very important paper⁸ on its relation to the Biblical Book of Proverbs, pointing out that there was evidence that at least one section of Proverbs borrowed expressions from the Egyptian text; in particular he identified thereby the true meaning of a puzzling word in Prov. xxii. 20, which must henceforth be recognized as meaning simply "thirty" and not "thrice" nor "the day before yesterday" nor "captains" nor yet "precepts" nor any of the other more or less conjectural significations that have been assigned to it during the last 2100 years from the time of the Septuagint translation onwards. Erman's discovery applied especially to the third division of Proverbs (Prov. xxii. 17—xxiv. 22). It was promptly reviewed by various German authorities on the Old Testament; the articles of Sellin⁹ and

¹ I, 337. ² *P.S.B.A.*, xi, 6, a vague suggestion as to the Hebrew אֶבְרֵי founded on p. 8, l. 13.

³ *The Precepts of Life by Amen-em-apt, the Son of Ka-nekht* in *Recueil d'études égyptologiques dédiées à la mémoire de Jean-François Champollion*, 431-446.

⁴ Pp. 9-18, 41-51, and Pls. i-xiv.

⁵ *The Teaching of Amen-em-apt, Son of Kanekht*, 93-234.

⁶ *En ny Visdomsbog fra det Gamle Egypten* printed in the *Nordisk Tidsskrift*, 1924, 94-107.

⁷ *Das Weisheitsbuch des Amen-em-ope* in *O.L.Z.*, 1924, 241-252; see also his review of Budge's and Lange's works in *Deutsche Literaturzeitung*, 1924, 509-516, and a review of the British Museum publication by Professor Spiegelberg, in *O.L.Z.*, 1924, 182-191.

⁸ *Eine ägyptische Quelle der "Sprüche Salomos"* in *Sitzb. d. Preuss. Akad. d. W., Phil.-hist. Klasse*, 1 May 1924, 86-93.

⁹ *Deutsche Literaturzeitung*, 1924, 1325 ff. and 1873 ff.

Journ. of Egypt. Arch. xii.

Gressmann¹ seem of particular importance². Amongst other things they show that the word "thirty" in Proverbs, though analogous to the number in Amenophis' Teaching, is applied to the thirty short sections into which the third part of Proverbs can readily be divided, each consisting of from one to four verses of our Bible. Quite recently Dr. Lange has published an admirable and most instructive edition of the text of Amenophis with translation and terse commentary³, acknowledging many contributions from Professor Erman, and a translation of the Teaching by Professor Ranke has just appeared⁴.

It is now time that an English translation, embodying all the new readings and interpretations, should be attempted. Towards its accomplishment I have had not only the printed works, above referred to, to consult. In 1924 Professor Erman transcribed and translated the whole text on slips for the great hieroglyphic dictionary which is being prepared at Berlin, and of these he most kindly sent me a complete copy. Moreover Dr. Lange had no personal access to the original by which the evidence of the facsimile could be checked, though Dr. Gardiner verified some readings for him; by the kindness of Dr. Hall, I have had ample facilities for examining the papyrus, and have thus been put in a position of great advantage for verifying old readings and obtaining new ones in doubtful cases; this was very important in view of certain imperfections in the facsimile mentioned below. I have read the whole text at Oxford in a *seminar*-class which Dr. Blackman was good enough to attend, and have therefore had the benefit of his valuable suggestions; and Dr. Gardiner has given me an exact copy of his careful transcript, made many years ago, of the Turin tablet. At the last moment Professor Sethe, Erman's successor at Berlin, has sent me some very important notes which he has published or is about to publish.

The papyrus in the British Museum measures just over twelve feet in length and ten inches in width. It has been cut into convenient lengths which are placed between glass so that the back and front are both visible. The back shows three pages of unpublished text⁵, as well as the published Hymns to the Sun and Moon⁶, and the Calendar of lucky and unlucky days⁷. The Teaching of Amenophis on the *recto* is almost absolutely complete, but unfortunately where the papyrus had been torn strips of transparent paper have been laid on in such a way as to cover written portions as well as unwritten; in these places the writing can be seen by the eye without much difficulty, but the photographing lens has too often failed entirely to penetrate the paper, so that the writing appears to cease in the facsimile where the paper begins⁸. In another place a tear across the page has been ill-adjusted so that the gaps resulting appear as black lines in the facsimile and have led to misreadings. Budge's transcription, being made from the original papyrus, escaped the doubts and snares into which the facsimile led some later students, and is generally very correct.

¹ *Die neugefundene Lehre des Amen-em-ope und die vorexilische Spruchdichtung Israels in Zeitschr. f. d. Alttest. Wiss.*, 1924, 272-296.

² See also GRIMME, *Weiteres zu Amen-em-ope und Proverbien* in *O.L.Z.*, 1925, 57-62, and LÖHN, *ibid.*, 72-73.

³ *Das Weisheitsbuch des Amenemope...herausgegeben und erklärt* (det Kgl. Danske Videnskabernes Selskab, *Hist.-fil. Meddelelser*, xi, 2, 1925).

⁴ In GRESSMANN, *Altorientalische Texte zum Alten Testament*, zweite Auflage, 1926, 38-46.


⁵ Described in *Facsimiles of Egyptian Hieratic Papyri*, Second Series, 18.

⁶ *Op. cit.*, First Series, Pl. xxxiii.

⁷ *Ibid.*, Pls. xxxi, xxxii.

⁸ Some corrections of the facsimile are shown on p. 225.

The Turin tablet was described by Dr. Gardiner some fifteen years ago as follows:

"Wooden tablet 30 cm. in height, 13.5 in breadth, 2 in thickness, a rounded projection in the middle of the top pierced for string. Bold writing of the end of Dyn. XX (det.  frequent), with cursive dates at intervals. Lines 1-8 very legible, then a gap; the lines after the gap and those on the other side of the board have been nearly erased and are clearly visible only from the side."

It will be seen below that the writing must probably be later than the Twentieth Dynasty. The text corresponds to 24. 1-25. 9 of the papyrus. As in the papyrus, each verse (and each heading) constitutes a separate line of writing. Curiously enough, the first eight lines are the last written; the young scribe evidently used and re-used the tablet and had already begun to clean off his earlier writing in order to continue the text. At the end of each writing lesson he noted the day of the month: the first date is "day 9" (?), written opposite the end of the sixth remaining line from the beginning, at the end of the front of the tablet (front 14); there follow, after eight lines (back 8), "day 8" (*sic* ?), after three more (back 11), "day 11" (?), after two more (back 13), "day 12" (?), after eight more (front 3), "day 17" (the only date perfectly preserved), and after five more lines, at the end of all, (front 8), "day 10 + " (?). These divisions have nothing to do with the sense, the date occurring as often as not at the end of the first line of a couplet. But it is noteworthy that the extract copied on the tablet begins precisely at the beginning of a page in the papyrus (24. 1), in spite of the fact that it is the second line of a couplet! The pages of the papyrus contain as many as 18-23 lines, so that this can hardly be a mere coincidence: it looks very much as if the teacher had dictated from the British Museum papyrus to the scholar who wrote on the Turin tablet. But if so, the teacher in his dictation corrected some of the mistakes of the papyrus, and of course the scholar made further mistakes.

A few corrections or alterations are recognizable in the text of the papyrus. The ends of three successive lines in one column (6. 4-6) have been smudged and re-written or corrected in coarser writing with very black ink, possibly by the scribe who wrote the three unpublished pages of proverbs on the *verso*. Another alteration looks more like the work of the original scribe, *viz.*, the phrase *ḥm-f sw* added to 9. 20, perhaps to replace the preceding *ḥq-f sw*.

Translation of the text of Amenophis is especially difficult for several reasons, and much of the version that follows is still only provisional. The mode of expression is artificial, using rare and poetical words and idioms; the phraseology is concise, employing few periphrases to clarify the grammatical connections; the sentences are short and disconnected; the spelling of words is inexact and unetymological to a degree unusual even in such late texts; and lastly more than one clear instance of scribal error in that portion of the papyrus for which there exists the parallel text of the Turin tablet, itself very faulty, shows that the student has to reckon with the probability of many errors elsewhere.

The scribe of the papyrus used red as well as black ink, and I have marked the red ink by underlining. The philological notes are intended only to supplement those of Lange and to correct occasional mistakes or misprints in his transcription from the hieratic¹; the literary notes aim at more completeness and therefore include remarks borrowed from Lange's work. Professor Simpson has kindly undertaken the task of comparing the text

¹ Lange's transcript being taken as the basis of this edition, the notes on readings assume that Egyptological students have it in their hands.

of the Hebrew book of Proverbs; my allusions to Proverbs may thus be regarded as references to the extracts in his paper.

As a matter of convenience I have given titles to the various divisions of the book, endeavouring thereby to indicate in some measure their general drift. The contents are thus:

- Preface: a. The Book. 1. 1-12.
 b. The Author. 1. 13-2. 12.
 c. The Person to whom the Teaching was addressed. 2. 13-3. 7.
- Chapter I. Charge to the Pupil. 3. 8-4. 2.
 II. Humanity, and various Advice. 4. 3-5. 8.
 III. Prudence in Argument. 5. 9-19.
 IV. The Passionate Man and the Tranquil Man. 5. 20-6. 12.
 V. Honesty and Tranquillity in the Temple. 6. 13-7. 10.
 VI. Encroachment on the Land of Others. 7. 11-9. 8.
 VII. The Search for Wealth. 9. 9-10. 15.
 VIII. Speak no Evil. 10. 16-11. 11.
 IX. Avoid the Passionate Man and his Ways. 11. 12-13. 9.
 X. Sincerity. 13. 10-14. 3.
 XI. The Dependent. 14. 4-15. 7.
 XII. The Honest Factor. 15. 8-18.
 XIII. The Kindly Scribe of Accounts. 15. 19-16. 14.
 XIV. Dignity. 16. 15-17. 3.
 XV. Thoth and the Scribe. 17. 4-16.
 XVI. False Weights and Sham. 17. 17-18. 13.
 XVII. The Corn-measurer. 18. 14-19. 9.
 XVIII. Over-anxiety. 19. 10-20. 6.
 XIX. Speech in the Law-court. 20. 7-19.
 XX. Professional Honesty. 20. 20-21. 20.
 XXI. Reticence. 21. 21-22. 18.
 XXII. Debate. 22. 19-23. 11.
 XXIII. Spare the Official's Hospitality. 23. 12-20.
 XXIV. The Secretary. 23. 21-24. 7.
 XXV. Respect for Infirmary. 24. 8-20.
 XXVI. Conduct towards Seniors in Society. 24. 21-25. 15.
 XXVII. Submission to the Old. 25. 16-26. 7.
 XXVIII. Benevolence. 26. 8-14.
 XXIX. The Ferry. 26. 15-27. 5.
 XXX. Epilogue. 27. 6-17.
 Colophon. 27. 18-28. 1.

PREFACE.

a. The Book.

1. 1. *Beginning of teaching how to live*¹,
2. *guidance*² *for welfare*;
3. *every direction for intercourse with elders*³,
4. *rules for (intercourse with ?) courtiers*⁴;
5. *knowledge how to answer*⁵ *a statement to its pronouncer,*
6. *and return a report to one that has sent him*;
7. *to direct*⁶ *him to the path of life,*
8. *and make him prosper upon earth*;
9. *to let his heart enter its shrine,*
10. *and steer it*⁷ *(?) clear of evil*;
11. *to save him from the mouth of others*⁸,
12. *praised in the mouth of men*⁹.


1. 5. The real meaning seems to be "to rebut a charge to the accuser."



1. 5-6. Compare Prov. xxii. 21.



1. 9. *I.e.*, to enable him to retain his composure and dignity, or (as Lange) to judge the situation. It is perhaps worth noting that from the second half of the New Kingdom onwards the funerary scarab which represents the heart is very frequently placed in a shrine-shaped pectoral, see REISNER, *Amulets*, 12189 ff., PETRIE, *Amulets*, no. 91.





1. 10. Or "and steer him"; or as participle "(the heart) steering him clear of evil."

This title of the book appears to consist of two stanzas of six lines, the first promising a guide to worldly prosperity, the second to moral welfare.


¹ In red ink. There is a clear round spot of red ink over the first  (evidently intentional). Can it be an indication to pronounce the letter with its proper value *m* instead of *n* as in the second instance?

² MÖLLER, *Palaeographie*, III, no. 160b, shows that  is a distinctive writing in late times for  as the determinative of speaking and eating. This is the writing of our scribe and I find it in "abnormal" hieratic as early as the end of the reign of Psammetichus I.




³ The text has  not .

⁴  as det. is a corruption from the word   , so spelt in 15. 9, 23. 13.

⁵ Signs quite clear though obscured in the facsimile by tracing paper, see the copy on p. 225. For *wibt* as "accusation" see *Unamün*, I, 18 (Blackman).



⁶ Add  to L's text following *hm*.

⁷ *Kte*, lit. "others," often with emphasis as "strangers," "outsiders." I follow Ranke in rendering it literally. Like the old *k-t-h* it seems to be of fem. gen., see 13. 19.

⁸ Read   .

b. The Author.


1. 13. *Made by a superintendent of the soil, experienced¹ in his office,*
14. *the fruit² of a scribe of Egypt.*
15. *Superintendent of cereals, regulating the waze-measure,*
16. *who ordained³ the corn-yield(?)⁴ for his lord.*
17. *Who inscribed⁵ islands and new⁶ lands* 18. *in the great name of His Majesty,*
19. *and set⁷ a land-mark⁸ at the boundary of the sown;*
2. 1.⁷ *who safeguarded the king by his markings⁹*
2. *and made the terrier¹⁰ of the Black Land.*
3. *Scribe establishing divine endowments of all the gods¹¹,*
4. *giver of leases¹² to other people.*
5. *Superintendent of cereals, provider (?)¹³ of food,*
6. *transporting (?) magazine(s) (?)¹⁴ of (?) cereals.*
7. *Tranquil indeed in Thinite Tēw-wēr,*
8. *justified in A-pe;*
9. *possessing a pyramid-tomb on the west of Sen-ut,*
10. *possessing a sepulchre¹⁵ in Abydos.*



¹ For  read  in the transcription; cf. Pap. Hood (Masp. *Ét. égyptiennes*, II), 2. 7-8: *sh pr-hd sh m ut-f*.

² Il. 14-18. The signs are all quite clear in the original though some are obscured in the facsimile by the tracing paper and shadow.

³ *Wky* appears not to be a synonym of *afry* though often associated with it, see BRUGSCH, *Wb.*, *Suppl.* 398; does it mean the portion of the harvest brought by the serf as payment to his lord?























⁴ Nothing lost after *mtwt*. For this word see Lange; the Coptic *μουτι*, "island," in origin probably means "new land" deposited by the Nile; here the word is in a transitional stage.










⁵ Only the  is lost, but the lower edge of the line is injured.




⁶ Dr. Blackman has pointed out to me that  is to be read (as in 7. 12) and not .




















⁷ Again the beginnings of the lines are obscure in the facsimile but are generally clear in the original.























⁸ *Mdn*, lit. "engraved inscription."

⁹ *Dny-t* quite clear. Cf. *sh dn*, "scribe of the register" (of the expedition)  . *L., D.*, III, 219^a, 15,                    , Pap. Hood, 2. 5.

¹⁰ This title in the same words in Pap. Hood, 2. 10-11.          quite clear.

¹² *Ssm* is not possible. The remains suggest   .

¹³ The imperfect sign looks like , the top only remaining. The group can hardly be read   , but as  below  in this papyrus is seldom to be distinguished from  (see *m^cr.*, 3. 18, 13. 18, *c_r*, 15. 20, 16. 4), we probably here have          , pl. *agwp*; this seems better than to read , and the plural may be intended.  for  seems quite probable.

¹⁴                     clear, the  apparently borrowed inappropriately (instead of ) from *ls*, "breath," see the new *Wb.*, 129. *Mr* and *is* are two kinds of tombs in the Abbott Papyrus.

2. 11. *Amenemopi son of Kanakht*¹, *

12. *justified in Tēw-wēr.*

1. 14. If the reading is correct the phrase must refer either to the author as "issue of an Egyptian scribe" (i.e., Kanakht), or, more probably, to his work as the "product of an Egyptian scribe," laying stress upon its Egyptian origin and making a true parallel to 1. 13. To render "corn-scribe of Egypt," as has hitherto been done, needs a serious correction of the text.

1. 15. "Superintendent of cereals" may be a poetic version of Amenophis' official title; it is repeated after four more pairs of phrases in 2. 5; in each case the whole line is written in red, no doubt implying that they represent leading ideas in the description. *Waze*, "Eye of Horus," is the sacred name of the corn-measure, see 18. 15.

1. 17-2. 4 must belong to his functions as superintendent of soil (?).

1. 18. Though written separately, this phrase necessarily belongs to the previous line, not only as its grammatical completion, but also because otherwise it would interrupt the steady march of pairs of lines.

2. 2. So far his faithful service to the king is insisted on; in the next lines his official dealings with gods and men are briefly noticed.

2. 3. "Endowments of all the gods" might mean "of all the gods" collectively as distinct from the endowments of the several deities; but probably here it is meant to include all endowments of every sort of deity, singly or otherwise.

2. 7, 8. These lines may refer only to death, "silent and still" (in the grave), with burial and cenotaph respectively at Tēw-wēr (the sacred quarter of Abydos, perhaps to be read as Nef-wēr) and A-pe (Panopolis). But the two epithets *gr m3c* (cf. 6. 7 and below, p. 227) and *m3c hrw* might refer to his character and conduct in life.

2. 9. Sen-ut is a name of Panopolis (Ekhmin) or of a temple there. Panopolis was on the east bank of the Nile and the position given "west of Sen-ut" for the tomb or cenotaph seems to point to some place on the opposite side of the river (probably on the edge of the desert where the cemeteries usually lay) and away from the main cemeteries of Panopolis which were in the cliffs of the eastern desert.


2. 11. Amen-em-opi is practically and perhaps entirely the same name as Amen-opi (Amenophis), Amanappa in the Tell el-'Amarnah tablets.


The long description of the author is expressed in literary form, and appears to avoid regular official titles. Until our knowledge of the organisation of Egypt after the New Kingdom is more complete we cannot tell what his official title would have been.

c. The Person to whom the Teaching was addressed.




2. 13. (for) his son, the youngest of his children²,

14. little³ compared to⁴ his relations;

¹ Read ; cf. line 15.

² Read rather *ms* .

³ The original is clear where the beginnings of lines 14-17 are obscure in the facsimile.

⁴  seems a much better reading of the hieratic than with , see the same combination in 4. 10, and contrast 3. 12, though  gives an excellent sense.

2. 15. *over the mysteries of Min¹ Kamephis (i.e., Bull of his Mother),*
16. *water-pourer² of Wennofri;*
17. *who instals³ Horus upon the throne of his father,*
18. *his (?) guardian (?)⁴ in his noble shrine;*
19. *fuller (?) [of the garments of Isis ?] the Great⁵,*
3. 1. *watcher (?)⁶ of the Mother of God;*
2. *inspector of the black kine of the terrace of Min,*
3. *protecting Min in his shrine;*
4. *Harma'kher his true name,*
5. *child⁷ of a nobleman of A-pe;*
6. *son⁷ of the sistrum-player of Shu and Tefnut,*
7. *chief cymbulist⁸ of Horus, Tewosri.*

2. 14. Or "The least of his relations," as Lange.



3. 4. Or "his justly earned (?) name," Harma'kher meaning "Horus justified."


3. 7. Or "Chief of the *harim* of Horus, T.,⁹" as Lange.


Chapter I. Charge to the Pupil.





3. 8. *He saith; First¹⁰ Chapter:*

9. *Give thine ears, hear (the words) that are said,*
10. *give thy mind¹¹ to interpret them;*
11. *to put them in thy heart is good,*
12. *(but there is) woe to him who neglecteth¹² them;*






¹  may be only a reduplication of the n of Min.  is simply a generic determinative; cf. line 11.

²  probable, but the fragments ill-adjusted.


³ The  clear.

⁴ Looks like   but not clear. The  might be a duplication of the following 



as occasionally elsewhere, 22. 11, 25. 5.


⁵ The line might be  (or     but the remains though considerable

are obscure. Dr. Gardiner kindly examined this and the preceding line without more success.

⁶ *Sn*,  (see Lange) occurs also in Max. Any (*Pap. Boulay*, no. 4), Pl. xvi, lines 5-6.

⁷ Note the artificial interchange of *ms* and *st* for paternal and maternal relation.

⁸ As Dr. Blackman remarked to me, *wr-t dhn* is probably the rare title of priestesses *wr-t dhn* (written with  ) here confused with *wr-t har-t*. For the former see my *Karanog, The Meroitic Inscriptions*, 82, and BRUGSCH, *Thebanus*, 918 ff., where the lady *Ho-*ankh** is called indifferently the *wr-t dhn* (p. 922) and the *lhyt nfr-t* (p. 920) of the Memphite Ptah.

⁹ The last sign or ligature in the hieratic may be  only.

¹⁰ I have rendered *hiti* by "mind" to distinguish it from *lb*, "heart," but this distinction cannot be altogether kept up throughout the text.

¹¹ *Wn*, "leap over," "skip," and so "neglect," but Lange gives it the meaning "abweisen" here and 26. 11.

3. 13. *let them rest in the casket of thy belly*¹,
14. *that they may be the threshold (?)² in thy heart;*
15. *verily (?) when there cometh a gale of speech,*
16. *they will be a mooring-post³ in (?) thy tongue.*
17. *If thou spend thy life-time with these things⁴ in thy heart,*
18. *thou wilt find it a success;*
4. 1. *thou wilt find my words a storehouse of life,*
2. *and thy body will prosper upon earth.*

3. 10, 11. Cf. 27. 13, 14, and see Prov. xxii. 17, 18.

3. 10 reminds one of Prov. i. 6, which is rendered by TOY, *Proverbs*, 4:

"That he may understand proverb and parable,
the words of sages and their aphorisms."

That sages loved conciseness and obscurity may readily be seen from this papyrus.

3. 11, 12. Closely resembling a passage in the introduction to the Proverbs of Ptahhotp (PRISSE, 5. 7-8):

"Instructing the ignorant to knowledge
and to the rules of good speech,
A profitable thing to him who shall obey,
(but) baneful to him that shall transgress it."

3. 17. The first line of the final quatrain recurs as the first line of the final couplet in Chapters III and XV.

The chapter is introductory: the charge to the pupil, recommending the Instructions.


Chapter II. Humanity, and various Advice.

4. 3. Second Chapter:


4. *Beware of robbing a poor wretch,*
5. *of being valorous⁵ against the man of broken arm.*
6. *Put not forth thine hand to touch an old man,*
7. *nor⁶ snatch (?) at the word of the aged.*

¹ "Belly" for "inmost soul," also in 10. 17, etc.

² *Pu^ct* = *nnn* according to DÉVAUD, *Etym. coptes*, 59, "threshold."

³ *N^cy-t*: cf. SPIEGELBERG, *Koptische Etymologien*, 9. It would seem permissible to read  as n, "for."

⁴ *Nn* may be referred to as "it" in the next line, but elsewhere, 5. 18, 17. 15, 18. 3, it is treated as plural.

⁵ This is probably the earliest instance of *n^ci* with hawk as determinative; the writing  here may be correct in associating it with the prowess of Horus rather than with the bold victorious swoop of hawks in general.

⁶ *Mtw*- evidently carries on the vetitive in many cases in this text, e.g., 5. 11. I have failed to find a corresponding example in Coptic or demotic.

Ty-r, cf. perhaps 15. 13.


Journ. of Egypt. Arch. XII.


4. 8. *Let not¹ thyself be sent on a wicked² mission,*
 9. *nor desire (the company of) him that hath performed it.*
 10. *Clamour not³ against him whom thou hast injured⁴,*
 11. *nor return him an answer to justify (?) thyself.*
 12. *Him who hath done ill, the quay slips away (?) from him,*
 13. *his wetted land⁵, it (?) carries him away;*
 14. *the north wind cometh down to end his hour,*
 15. *it uniteth with the tempest⁶;*
 16. *the thunder is loud, the crocodiles are vicious.*
 17. *Thou passionate man, what is thy condition?*
 18. *He cries out, his voice (reacheth) to heaven.*
 19. *Thou Moon, bring forward⁷ his crime!*
5. 1. *Steer that we may carry the bad man over,*
 2. *for we will not do as he (hath done).*
 3. *Lift him up, give him thy hand,*
 4. *commit him to the arms of God;*
 5. *fill his belly with bread of thine⁸,*
 6. *that he may be satisfied and understand (?).*
 7. *Another thing good in the heart of God*
 8. *is to pause before speaking.*

4. 5. "Of broken arm" is an expression for "weak," "helpless."




4. 6, 7. L. renders these as advice not to be too forward in approaching or addressing the old or the great.

¹ This translation of *m-dr*, here and in 11. 17, 15. 10, 18. 18, 21. 19, 25. 19, I owe to an article written by Sethe for the *Zeitschr. f. äg. Spr.*, LXII, of which he most kindly lent me an advanced proof. He there seems to show that the scribe of the papyrus systematically wrote the prohibitive *mdy-t* with the group *m-dr*. In 21. 1 the Turin tablet gives *m-dy-t* corresponding to *m-dr* and in 24. 2 Lange has read *m-dy-t* for *m-dr* as a correction of the text on the analogy of 21. 1; but, before Sethe, no one had ventured to make a general application to all instances.



² Read *n'ht* .


³ Lange gives to *bgj* the meaning "clamour," which however requires a correction of the det. to  is certain.

⁴ It seems impossible to take *p th-k* otherwise than as relative *sdm-f*; "him that attacketh thee" would be *p th-tw(k)*, cf. 25. 19 for *twk*.

⁵ *Hly*: the same fem. word "wet land" (?), occurs in the Dakhleh Stela (*Rec. de Trav.*, XXI, 12), line 6, where    "laid waste," follows in the original, and line 9. Cf. 10. 10 below.

⁶ *Sw* for fem. *s*. *Phph* is used of hacking or hammering, *FEET*, *Pap. Mayer A*, 6. 23, so here perhaps of thunderclaps or lashing of waves.

⁷ *Sk' btt*, a technical term for "impeachment," "accusing of crime," see Lange, also Gardiner, in *Journal*, vi, 198, note 2. In Brit. Mus. Pap. 10562 (unpublished, a short funerary papyrus shown to me by Mr. Glanville) the heart is adjured "do not set forth a crime (*sk' btt*) of N." In LEPSIUS, *Totib.*, cap. 163 (heading) we have   *btt*, similarly.

⁸ *Mde-k* probably  *ntak*.

4. 12. *Lit.* "leaves him." Any translation at present must be conjectural.

4. 17. "Passionate man," *lit.* "hot," as opposed to the "tranquil man," see below, p. 227.

4. 19. If I am not mistaken, this jerky description of the miserable plight into which a bad man may fall leaves him at the point of death: the judgment before Osiris is already set and the Moon, the heavenly manifestation of Thoth, is called upon to accuse him.

5. 1, 2. Or "Steer that we may bring over the bad man,
for we will not do like him."

This seems to fall into four sections, the first two of which are quatrains; the third is of eight lines describing how a bad man has fallen into desperate danger, followed by six showing the merciful man rescuing him, requiting evil with good. The last section is a pair of lines the subject of which is developed in the next chapter. What the connection is between the different sections is not obvious, but all of them at least relate to behaviour under different circumstances: (1) be gentle to the weak and aged; (2) refuse to undertake wrongful business and do not attempt to justify your wrongful acts; (3) be kind to the evil-doer when distress comes upon him; (4) think before speaking.

Chapter III. Prudence in Argument.


5. 9. *Third Chapter:*


10. *Do not join wrangling with¹ the hot-mouthed²,*
11. *nor goad him with words.*
12. *Pause before an intruder,*
and give way unto him that attacketh.
13. *Sleep a night before speaking;*
14. *the storm, it bursts forth like flame in straw.*
15. *The passionate man in his hour*
16. *withdraw³ thyself before him;*
leave⁴ him to his own devices;
17. *God will know how to reply to him.*
18. *If thou spend thy life-time⁵ with these things in thy heart,*
19. *thy children shall see them.*

5. 15. "In his hour," meaning when his characteristic tendencies are stirred, a frequent expression in Egyptian.


5. 16. Or "forgive (?) it unto him."


5. 19. Not only will he see the good results, but his children also will realize the excellence of the Teaching and follow it.

¹  is the regular spelling in cursive texts as early as the Twenty-fifth Dynasty.

² *Tt-r*, "hot-mouthed," with det. . Serpents were supposed to breathe burning poison; cf. Shrine of El-'Arisah (*Tell el-Fahudiyeh*, PL xxv), line 15.

³ *Teh* must be the same word as in 17. 2, but in syllabic spelling. Cf. Pap. Anast., iv, 11. 9=Sall., 1, 9. 11, and *ateh* studied by CHABAS, *Pap. Mag. Harris*, 234, no. 580.

⁴ The frequent meaning "forgive" of *ne* in Coptic is perhaps a little too strong here. There is no  after *h¹te-s*.

⁵ Rather *ne* .

This short chapter is entirely devoted to the subject of prudence in reply to an adversary, developing the final couplet of the preceding chapter. The chapter falls into couplets; ll. 12 and 16 appear each to contain a full couplet and ll. 15 to 17 make a quatrain. The final couplet is repeated at the end of Chapter XV, the first line in it appearing also in the final quatrain of Chapter I.

Chapter IV. The Passionate Man and the Tranquil Man.

5. 20. Fourth Chapter:

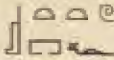
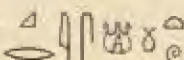
6. 1. *As to the passionate man in the temple,*
 2. *he is like a tree grown in the forest (?) ;*
 3. *in a moment comes its loss of foliage¹ ;*
 4. *its end is reached in the dock-yard (?)² ;*
 5. *or (?) it is floated far from its place³,*
 6. *the flame is its winding-sheet³.*
 7. *The truly tranquil man, he setteth himself aside,*
 8. *he is like a tree grown in a plot (?) ;*
 9. *it grows green, it doubles its yield,*
 10. *it (stands) in front of its lord,*
 11. *its fruit is sweet, its shade is pleasant,*
 12. *and its end is reached in the garden.*

The division into six-line stanzas is obvious, contrasting the fate of the man of unrestrained temper and the man of tranquillity, each engaged in the service of the temple. The former is compared to a wild tree, which is used for shipbuilding (?) or burned for charcoal. The doubtful word at the end of line 2 should mean "fore-court (?) " of the temple; but Erman's correction giving the meaning "wood," "forest" is convincing unless we may accept Ranke's version "abroad," "outside." The meaning of the new word in line 4 translated "dock-yard" can only be conjectured from its determinatives of water and chamber: L. translates it "harbour." In Egypt the pit in which a tree has been planted in a garden is surrounded by a raised rim to retain water; possibly the new word in line 8 designates such a pit.

The similes and the contrasts are like those applied to persons who put their trust in man and in God respectively in Jer. xvii. 5-8, and to the pious and the wicked in Ps. i.

¹ *Srtm* may be the same as *s'tm*, the "green" product of persea (?) trees in the demotic of SPIEGELBERG, *Der ägyptische Mythos vom Sonnenauge*, no. 740 in the glossary.

² *Mh'm*. After □ is a rounded mark, perhaps an accidental spot of ink, but not |. One may suspect that this new word is the same as the fragmentary fem. word translated "Sumpf" (swamp) in the above *Mythus*, 21. 13.

³  and the last four signs of  (*raice*) have also been smudged, and re-written coarsely in thick black ink.

Chapter V. Honesty and Tranquillity in the Temple.

6. 13. *Fifth Chapter:*


14. *Misuse (?)¹ not the shares of the temple,*
15. *be not greedy, (thus) wilt thou find excess (beyond your expectation),*
16. *remove not a servant of a god,*
17. *in order to do a benefit to another.*
18. *Say not "to-day is as to-morrow";*
19. *how will these things end?*
7. 1. *The morrow is come, to-day is gone,*
2. *the deep² hath become the edge of the waves,*
3. *the crocodiles are uncovered, the hippopotami on dry land,*
4. *the fishes gasping (?)³;*
5. *the jackals are sated, the wild-fowl in festival,*
6. *the nets⁴ are empty (?)⁵.*
7. *As to all the tranquil in the temple,*
8. *they say "Great is the good pleasure of Rē."'*
9. *Hold fast to the tranquil man, (thus) wilt thou find life,*
10. *(and) thy body shall prosper upon earth.*

7. 8. "The important thing is the well-pleasing of Rē," *lit.* "that which Rē praises" and so perhaps "the approval of Rē." The sentiment is submission to the will of Rē.

7. 9. Or perhaps "fill thyself with tranquillity."

The chapter falls into three sections: a quatrain, respect the property of the temple; an eight-line stanza, remember that circumstances change like the Nile; a quatrain, be tranquil and trust in God. The thought, however, may be continuous: although there may be an excess of revenue or labour which might be spared from the temple and which the hasty and unscrupulous man would not hesitate to divert from it, to-morrow all may be upset.

¹ *šg*, see Lange; but *wš*, *wšx* means "daub over," "overlay," and the meanings "overlay," 18. 12, "hide up (fraudulently)" would also suit the passages in which the word occurs.

² *p mt*, "the deep," masc. *p mty*, I. Kham., 3. 13, etc., *ἡ πόσις ἡ μέση* = *البحر العظيم*, LEMM, *Triadon*, *Φρε. Πτο, η* seems to be the masculine form of *μτω, τ* with almost the same meaning.  is quite clear.

³ *Mzf*. One might connect this with *شعب* and translate "driven mad," "wildly excited," but see Lange.

⁴ SPIEGELBERG, *O.L.Z.*, 1924, 185, pointed out that we have here the transcript of *טנמרת*, "net."

⁵ *h*, used of the action of the Hittite allies in reviving their half-drowned chieftain by holding him upside down, must mean something like "drain," "empty."

Chapter VI. Encroachment on the Land of Others.

7. 11. Sixth Chapter:

12. Remove not the landmark on the boundaries of the sown,
13. nor shift¹ the position² of the measuring-cord;
14. covet not a cubit of land,
15. nor throw³ down the boundaries of the widow.
16. The rut of trampling (?)⁴, the wear of time,
17. he who wrongfully seizes it⁵ in the field⁶,
18. if (?) he snare by false oaths⁷,
19. is lassoed by the Power of the Moon.
8. 1. Mark well him who hath done this on earth,
2. for he is an oppressor of the weak,
3. he is an enemy working destruction within thee,
4. deprivation of life is in his eye,
5. his house is an enemy to the town;
6. (but) his barns⁸ are destroyed,
7. his goods are taken out of the hand of his children,
8. and his property is given to another.
9. Beware of throwing down the boundaries of the sown,
10. lest a terror carry thee away;
11. a man propitiates God by the Power of the Lord⁹,
12. when he defines the boundaries of the sown.
13. Desire then to make thine own self prosperous¹⁰;
14. beware of the Universal Lord;
15. trample not the furrow of another,
16. it is good for thee to be sound in regard to them.

¹ The det. of *tfty* should perhaps be corrected to Δ , see BRUNSCH, Wb., 1544, and ERMANN-GRAPOW, *Handwörterbuch*, s.v.

² *htw*, of time, 3. 17, here of place with appropriate det., both as in Old Egyptian.

³ *Hd*, also 8. 9, usually of bulls fighting.

⁴ *Hbb*, see VOGELIUS, *Klagen des Bauer*, 49.

⁵ ⤿ is added above *sw* evidently as a correction (for the two cannot stand together), but if so the original reading seems the better when taken with the following line.

⁶ This serice, see 8. 17, etc., makes an extraordinary division of the sign ⤿ in his hieratic, which I do not remember to have seen elsewhere.

⁷ *chny n sz*, again 14. 9.

⁸ *šc*, older *šc*.

⁹ ⤿ not ⤿ . The sign looks different from ⤿ (but not like ⤿) only because a dark fragment of papyrus lies across the stroke on the right.

¹⁰ Note that this line was quoted by RENOUF, *P.S.B.A.*, XI, 6, in discussing the Hebrew puzzle אכר in Gen. xli. 43, for which however see SPIEGELBERG, *Aegyptol. Randglossen z. A.T.*, 14.

8. 17. *Cultivate the fields, that thou mayest find what thou needest;*
 18. *and receive the bread¹ of thine own threshing-floor²;*
 19. *better is a bushel³ that God giveth thee*
 20. *than five thousand (obtained) by force;*

9. 1. *they stay not a day in store⁴ and barn,*
 2. *they make no food⁵ in the beer-jar⁶;*
 3. *a moment is their duration in the granary,*
 4. *when morning cometh they have gone below⁷.*
 5. *Better is poverty at the hand of God*
 6. *than riches in the storehouse;*
 7. *better is bread with happy heart*
 8. *than riches with vexation⁸.*

7. 14. "Cubit of land," i.e., a cubit width in the arura, or 100 square cubits, see *P.S.B.A.*, xiv, 410.

7. 16. Or "which time has diminished."

7. 17. Or "that which thou hast seized wrongfully," see p. 204, n. 5.

7. 19. Or "Mighty Will"; in any case it means spiritual not physical power.

8. 1. Or "See (what happens) in regard to"; the same expression in 14. 19.


8. 6. It is difficult to see why this line is written in red ink, unless as marking emphatically the sudden downfall of the wicked man. "He is an oppressor of the weak," etc., etc., "(BUT) HIS BARNS ARE DESTROYED," etc.

8. 10. This phrase recurs in 13. 9.































8. 11. It is not quite clear to whom the rather unusual expression "the Lord" is to be referred; see below, p. 230.

9. 8. Instead of "vexation" we might read "strife," to agree with the quotation from Prov. xvii. 1, but the former is more likely.

The first part of this long chapter consists of two quatrains and a double (?) quatrain warning against unrighteous encroachment upon other people's land. This is followed by a group of two quatrains going over the same subject a second time. The third section counsels the hearer to be content with the result of cultivating his own land, in two

¹ The frequent *šp anw* in prayers for offerings seems to show that we have here an example of superfluous .

² Probably *šty* (-*k*) *šc* -*k* would be the correct expression.

³                              



quatrains, followed by a quatrain on happy poverty, which recurs (with the first line varied) at the end of Chapter XIII.

There are several points of contact with Proverbs. As to the first two sections, cf. Prov. xxii. 28; xxiii. 10, 11, and as to the final quatrain, Prov. xv. 16, 17; xvii. 1.

Chapter VII. The Search for Wealth.



9. 9. *Seventh Chapter:*

10. *Cast not thy heart after riches;*
11. *there is no ignoring of Shay and Renent.*
12. *Place not for thyself thy thoughts (on things) outside;*
13. *every man is (destined) for his hour.*
14. *Labour not to seek increase,*
15. *(then ?) thy needs shall be secure for thee;*
16. *if riches be brought to thee by robbery,*
17. *they shall not stay the night with thee;*
18. *day dawneth and they are not in thy house,*
19. *their places shall be seen, but they are not (there);*
20. *(perchance) the earth hath opened its mouth, "It adjusts¹ it and swallows it,"*
10. 1. *and² has sunk them in Tēi,*
2. *(or) they have made for themselves a great breach³ of their measure,*
3. *and they have sunk themselves in the corn-store,*
4. *(or) they have made themselves wings like geese,*
5. *they have flown to heaven.*
6. *Rejoice not thyself (because of) riches by robbery,*
7. *nor groan over poverty;*
8. *when an archer in front pushes forward (?)*
9. *his troop⁴ leaves him (in difficulty);*
10. *the boat of the covetous is left (in) the mud,*
11. *while the bark of the tranquil sails (with the breeze).*
12. *Thou shalt pray to the Aten when he rises,*
13. *saying "Grant me prosperity and health,"*
14. *and he will give thee thy needs in life,*
15. *and thou wilt be safe from fear.*

¹ The new *Wörterbuch* guarantees a transitive use of *ḥg*, ; it might be better to correct to *ḥg*, , which can also be transitive, *lit.* "It enters it, it swallows it."

² The scribe having been disconcerted and muddled by the length and peculiarities of the last line apparently wrote *mdw-f* for *mtw-f*.

³ Perhaps *bb*, *ḥnḥ*, is intended.

⁴ One would expect *dr-t*, , but the reading with  is clear. "Troop," *lit.* "hand"; cf. *manipulus*, perhaps even in the military sense in spite of Ovid's etymology. In Middle Kingdom accounts, gangs consist of five or ten men including a ganger, see my *Kahun Papyri*, p. 40 ff.

9. 11. Psais and Termuthis, deities of fortune; cf. 21. 16.
 9. 13. Or "belongs to his hour," possibly referring to the horoscope (Blackman).
 9. 15. Or "while thy needs are secure for thee," as Lange.
 9. 20. Or "Whatsoever entereth, it swallows"; these words seem independent of the constructions in the context, and if correct must be a quaint phrase descriptive of the voracious mouth of the earth, as it were its name in apposition to the word "mouth."

10. 1. Tēi, i.e., the Underworld.

10. 2. Or "a great cavern (?) of their size."

10. 4. The name indicates the largest kind of domesticated goose.

A continuation of the preceding chapter, against avarice, in four sections:

- (1) Two couplets on the necessity of yielding to fate.
- (2) Twelve lines on the ephemeral character of riches.
- (3) Six lines on the advantage of contentment.
- (4) The prayer of the contented man.

The second section has a remarkable parallel in Prov. xxiii. 4, 5.

Chapter VIII. Speak no Evil.

10. 16. *Eighth Chapter:*

17. *Set thy goodness¹ in the bowels of men*

18. *that everyone salute thee;*

19. *(for) one acclaims the Uraeus,*

20. *and spits on the Apophis-serpent.*

21. *Keep sound thy tongue from words of detraction;*

11. 1. *(thus) wilt thou be the favourite of the others,*

2. *thou wilt find thy place within the temple,*

3. *and thy provisions in the bread-offerings of thy lord;*

4. *thou wilt be revered in old age and be hidden (in) thy coffin²,*

5. *and be safe from the Power of God.*

6. *Cry not "crime" at a man;*

7. *hide the manner of (a fugitive's) flight.*

8. *If thou hearest³ (to judge?) a thing that may be either good or bad,*

9. *do this outside, (where) it is not heard;*

10. *put a good report upon thy tongue⁴,*

11. *while the ill is hidden in thy belly.*

10. 17. *I.e., accustom men to have a good opinion of thee planted in their inmost soul, lit. "belly."*

11. 1. Or "that thou mayest do that which people love."

11. 5. "Power," see note to 7. 19. One is tempted in some passages to render it by "Wrath."

¹ The substantive is similarly spelt in 14. 18.

² Or better "and thy coffin will conceal thee," *tw-k* for earlier *tw* as in 25. 19.

³ *Sdm* probably in the judicial sense, but in the ordinary sense in line 9.

⁴ Correct probably to *hr* as *t-k*.

11. 7. Or as L., "when the reason of (his) flight is hidden."


11. 9. Or as L., "leave it outside (as if) it had not been heard."

Three sections: (1) a quatrain on the importance of good repute; the cobra is as dangerous as any serpent, but is greeted with joy, while the Apophis-serpent, enemy of Rē, is execrated; (2) six-line stanza, abstain from evil-speaking; (3) six-line stanza, conceal evil report.

Chapter IX. Avoid the Passionate Man and his Ways.

11. 12. Ninth¹ Chapter:

13. *Do not associate to thyself the passionate man,*
14. *nor approach him for conversation.*
15. *Keep sound thy tongue from answering thy chief,*
16. *and guard thyself from reviling him.*
17. *Cause him not to cast his speech to lasso thee*
18. *and give not free rein to thine answer,*
19. *thou shalt discuss the answer with (?) a man of thine own measure,*
20. *and beware of headlong utterance² of it.*
- 12.³ 1. *Swift⁴ is speech when the heart is hurt,*
2. *more than wind before water (?).*
3. *He is ruined and he is built up by his tongue,*
4. *yet he speaks an ugly(?)⁵ speech;*
5. *he makes an answer worthy of a beating,*
6. *(for) its freight (?)⁶ is of ill;*
7. *he makes a voyage like all the world,*
8. *but he is laden with false words;*
9. *he acts the ferryman (?) of weaving (?) speech,*
10. *he goes and comes with wrangling;*
11. *when he eats, when he drinks within,*
12. *his answer is (heard) without;*
13. *verily the day of charging his crime*
14. *is a misery for his children.*
15. *Would that Khnum might bring in indeed, indeed (?),*
16. *the potter's wheel⁷ for the fiery-mouthed,*
17. *to mould and burn hearts⁸ (like vessels)*
- (and reform his ways!).*


¹ Insert  before the numeral.


² *Tfdn*. The verb is preserved in Coptic only in $\pi\chi\sigma\tau\eta\iota$; $\pi\sigma\sigma\sigma\tau\eta\iota$, "headlong," "at random," Luke iv. 29, "by some other (unauthorized) way," John x. 1.

³ The papyrus is split down the middle of this page and not properly adjusted, hence there is a black shadow-line in the facsimile.

⁴ *Šrē*, BRUGSCH, *Wb.*, 1429; *hd* *ib* again 13. 12.

⁵ *Ngē*, perhaps to be read as one word; cf. BRUGSCH, *Wb. Suppl.*, 702.

⁶ The sign can hardly be other than , see MÖLLER, *Paläographie*, II, III, no. 42R.

⁷ *Nhp* .

⁸ The second half of the line is evidently corrupt.

(*He is like a*)

12. 18. *he is like a wolf's whelp¹ in the farmyard,*

19. *he turns² one eye contrary to the other,*

13. 1. *he sets brethren³ to wrangling;*

2. *he goes before every breeze like clouds,*

3. *he diminishes the colour of the sun,*

4. *he bends (?) his tail like a young crocodile,*

5. *he gathers himself together, crouched (?)⁴;*

6. *his lips are sweet, his tongue cold (?)⁵,*

7. *(but) flame burns in his belly.*

8. *Leap not to cleave to that (fellow),*

9. *lest a terror carry thee away.*

12. 2. *I.e., like the gusts which precede rain; or perhaps "wind of the coast-land (?)."*

12. 4. Or "calumnious speech."

12. 7. Lange corrects the reading to "he makes strife among people."

12. 9. The meaning may be: "he weaves speech" even as a ferryman, going to and fro; or perhaps "he is snaring (by) words."

12. 13. When he is accused, his children are involved in the heavy penalty.

12. 15-17. I cannot but follow Lange's brilliant recognition of the drift of these lines, including the assumed omission of two lines which are necessary to the arrangement in couplets; l. 17 is obviously corrupt and is paraphrased here.

13. 4. Preparatory to striking.

13. 6. Or "his tongue bitter."

In spite of its length this chapter makes a connected whole. It consists of thirty-six lines and the red ink of the nineteenth (12. 11) seems to mark the beginning of the second half numerically, without much reference to the sense. Beware of associating with or imitating the passionate man is the text of it all; the chapter beginning and ending with a couplet to this effect. Between these couplets are, first, eight lines against answering a superior rashly, and then twenty-four lines, perhaps to be divided into three groups of eight, describing the passionate man.

The last line recurs in 8. 10.

The first couplet and the last are closely like Prov. xxii. 24, 25.

Chapter X. Sincerity.



13. 10. *Tenth Chapter:*


11. *Do not salute thy passionate⁶ (opponent), forcing thyself,*





12. *nor grieve thine own heart (thereby);*


13. *say not to him "Hail to thee?" in falsehood,*


14. *when there is terror in thy belly.*

¹ For  read .


² *Man(b)* as Erman; there is no place for .

³    .

⁴ *Gt* possibly , "mutilated," "cut short," as Erman suggested. The idea may be that he crouches preparing to spring.

⁵ *ikn*, ? or as Lange. It can hardly mean "cold" in 24. 3.

⁶ The line must be faulty. *Pe-k imm*, "thy passionate man," seems an extraordinary expression.


⁷ *Bre-t* also 18. 22 = , *Zeitschr. f. äg. Spr.*, xxxviii, 86.

13. 15. *Speak not to a man in falsehood,*
 16. *the abomination of God;*
 17. *sever¹ not thy heart from thy tongue,*
 18. *that all thy ways may be successful.*
 19. *Be thou resolute² before other people³,*
 14. 1. *for one is safe at the hand of God;*
 2. *hated of God⁴ is the falsifier of words,*
 3. *his great abomination is the dissembler (?)*.

13. 11. A possible rendering "Do not salute in thy passionate anger, forcing thyself" may be better, but gives no antecedent to "him" in line 13.

13. 14. Or perhaps "a terrible scheme."

13. 16 = 15. 21.

13. 17. The sentiment is that seen in Horapollo, II. 4, "A man's heart hung from the windpipe" (i.e., ) means "the mouth of a good man." Cf. GRIFFITH, *Hieroglyphs*, 65.

14. 3. "Dissembler," *lit.* "he that quarrels in the bowels," apparently meaning "allows his tongue to conflict with his inmost feelings" (so Lange).

Twelve lines on straightforwardness in behaviour and speech; they appear to be lightly divided into four quatrains. The first has analogy to Prov. xxvii. 10-14: 13. 15, 16, 14. 2 to Prov. xii. 22; 14. 1, cf. Prov. xvi. 3.

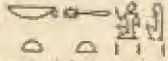
Chapter XI. The Dependent.

14. 4. *Eleventh Chapter:*

5. *Covet not the property of a dependent,*
 6. *nor hunger for his bread.*
 7. *Verily the property of a dependent, it is a choking(?)¹ for the throat,*
 8. *it is a vomiting(?)² for the gullet.*
 9. *When he has obtained³ it by false oaths*
 10. *his desire is perverted(?)⁴ by his belly.*
 11. *It is through (?) the treacherous⁵ that success (?) is missed (?),*
 12. *(both) bad and good⁶ fail.*

¹ *Psh*, see the word in Pyr., etc.

² *Dns*, "heavy," must mean "immoveable," "steadfast," "courageous," in holding to opinions, cf. 20. 3.

³ Note the fem. collective *kwy* like the earlier .

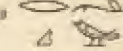
⁴ There is a spot between *mad* and *ntr*, perhaps not intentional.

⁵ *Šnc*, spelt like "storm" or "cloud" but perhaps meaning here "obstruction" and so "choking."

⁶ *Šky* (see Lange) may be a synonym of *šry*, "cough," EBBEL, *Zeitschr. f. äg. Spr.*, LIX, 144.

⁷ *Škpr-f*, quite clear in the original; evidently with the sense of the demotic *dy kpr*, *ꜥꜥꜣ*.

⁸ *Šst*, see Lange.

⁹ , quite clear in the original, so also *manš*.

¹⁰ Or supply (*m*) before *nfr*.

14. 13. *When thou failest before thy chief,*
 14. *and art feeble (?) in thy speeches,*
 15. *thy entreaties are replied to by curses,*
 16. *thine obeisances by beating.*
 17. *The (too) great mouthful of bread, thou swallowest it and vomitest it,*
 18. *thou art emptied of thy good.*
 19. *Mark well the examination(?)¹ of a dependent,*
 15. 1. *when slaves reach him,*
 2. *and all his people are fast in fetters,*
 3. *and where(?)² is the executioner?³*
 4. *(Even) when thou art released before thy chief,*
 5. *then thou art disgraced (?) unto thy subordinates.*
 6. *Thou shalt steer away from the dependent on the road,*
 7. *thou shalt see him and keep clear⁴ of his goods.*

14. 7. Or "a storm in the throat."

14. 9. "Obtaining" means "making," not "acquiring"; the translation may, however, be "When he has established himself (acquired position) by false oaths."

14. 11, 12. The translation is very doubtful; 12 may be "bad is without good."

14. 15. Or "repelled."

14. 17. Or "O thou that fillest the mouth with abundant bread," as Erman.

14. 19. Or "the inspector of a dependent."



15. 3. Perhaps meaning that the executioner is called for. Or translate as Lange "and which of them deserves the block?"

The difficulties in the way of understanding the chapter are many. *Tw*, translated "dependent," occurs elsewhere contrasted with *sr*, "notable," "magistrate," "noble," who is the subject of the next chapter, but the meaning of the word is still doubtful. Poverty and dependence seem implied; can the word have acquired also an adverse moral significance, like our word "mean" opposed to "noble"?



The first and last complets announce and sum up the main subject, which seems to be the unenviable position of a *tw*, "dependent," or "peasant," rather than a warning against wishing to rob him of his goods. It may be in fact a recommendation to be content with one's lot.

14. 5-8, 17: cf. Prov. xxiii. 6, 8.

¹ *Hg.* Can this be connected with *griw*, "discussion," "research"? In the Bologna papyrus the word is feminine and it never has the det. of a person.

²  again 18. 2 =  usually "where?" sometimes "which?"

³ *H uny-t.*

⁴ The det. of the rudder  occurs also in  *Max. Any.* 23. 14.

Chapter XII. The Honest Factor.

15. 8. *Twelfth Chapter:*

9. *Be not greedy of the things of a noble,*
10. *do not give (away) a great feed of bread in extravagance¹;*
11. *if he setteth thee to manage his affairs,*
12. *refrain from what is his², that what is thine² may prosper.*
13. *Do not take (a share) with the passionate³ man,*
14. *nor associate to thyself a treacherous (?) person.*
15. *If thou art sent to transport straw,*
16. *refrain from its corn-measure.*
17. *The detection(?)⁴ of a man in a poor business*
18. *prevents a repetition of his employment another time also.*

15. 12. The others translate "when his prosperity hates (*i.e.* conflicts with) thine," but this seems less likely.

15. 13. "Passionate" here perhaps implying "discontented."

15. 14. Or "an enemy," as Erman and Lange.

15. 16. Perhaps meaning "do not go beyond your instructions": or be content with your humble duty and do not court the more important one of measuring the corn-yield.

15. 18. The piling up of expressions for "repetition" is almost absurd and is contrary to the usual concise structure of the sentences, but *cf.* 20. 19 and Lange's note.

Apparently a series of rather disconnected recommendations. A quatrain against coveting the wealth of a noble (parallel to the subject of the preceding chapter), followed by three separate couplets. But little of it is really intelligible.


Chapter XIII. The Kindly Scribe of Accounts.




15. 19. *Thirteenth Chapter:*

20. *Do not pervert a pen-man (?) in regard to a papyrus,*
21. *the abomination of God.*
16. 1. *Bear not witness by a false statement,*
2. *nor displace another man by thy tongue.*
3. *Do not make assessment (?) (of) one who hath nought,*
4. *nor falsify thy pen.*

¹ On a stela with a long decree of Sethos I, copied by Mr. Terence Gray at Nauri between the Second Cataract and the Third, the expression *m škr n wstn*, "in a manner of freedom," "irresponsibly (?) " or perhaps "by customary license" is opposed to *m hrꜥ*, "by robbery," in regard to the seizing of cattle (I. 35).

² *mwꜥ...nwn*. It would be more usual, but probably less "poetical," to use the plural.

³ Perhaps a second  has been omitted by the scribe.

⁴ *Twt*(?) ending in , , or .

17. 1. Or "he will hesitate (?)."

17. 3. Or perhaps "another business will take him away," or possibly "bring him."

Ten lines as to dignified treatment of a suitor(?).

Chapter XV. Thoth and the Scribe.

17. 4. *Fifteenth Chapter:*

5. *Do well that thou mayest reach what I(?) am;*
6. *do not ink a pen to do an injury.*
7. *The beak of the Ibis is the finger of the scribe;*
8. *beware of disturbing it.*
9. *The Ape dwelleth in the House of Khmûn,*
10. *(but) his eye travels round the Two Lands;*
11. *if he sees him that perverts with his finger,*
12. *he takes away his provisions in the deep waters.*
13. *As for a scribe who perverts with his finger¹,*
14. *his son shall not be registered.*
15. *If thou spend thy life-time with these things in thy heart,*
16. *thy children shall see them.*

17. 5. Or "a certain rank," or "an assured condition."

17. 9. Khmûn is Hermopolis Magna, the modern Eshmûnên.

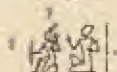
* Warning the scribe against misuse of his pen; again ten lines, followed by the terminal couplet of the third chapter.



Chapter XVI. False Weights and Sham.

17. 17. *Sixteenth Chapter:*

18. *Tamper not with the scales, nor falsify the kite-weights,*
19. *nor diminish the fractions of the corn-measure.*
20. *Desire not the corn-measure of the fields,*
21. *and then neglect those of the Treasury.*
22. *The Ape sitteth by the balance,*
18. 1. *his heart being the plummet.*
2. *Where is a god so great as Thoth,*
3. *he that discovered these things, to make them?*
4. *Fashion not for thyself deficient kite-weights;*
5. *they abound in armies (?)² by the Power of God.*
6. *If thou seest another perverting,*
7. *thou shalt pass by him at a distance.*

¹  .

²  .

The hieratic sign is exactly like that of the soldier with shield, except that it is without the characteristic arrows; compare the faulty  for  in line 8. It must mean that the weights have armies to defend them, thanks to Thoth.

18. 8. *Covet not copper,*
9. *avoid beautiful linen;*
10. *what is the good of it, a cloak of mek?¹*
11. *when it is a perversion before God*
12. *if gold-bases (?)² be overlaid (?) to (appear as) pure gold (?)³,*
13. *at dawn it is of lead.*

17. 19. Or "spoil not."

17. 20. *I.e.* measure carefully the farmer's harvest and be careless of the payment to the treasury; seeing that the farmer's contribution is of full measure and keeping back a share from the treasury for yourself?

18. 2. Or "like the great one, namely Thoth," as Lange.

18. 6. Or "cheating."

18. 11. Or "when it is purloined from before God."

Apparently three quatrains on honest dealing, followed by a six-line stanza on the vanity of outward show.

Chapter XVII. The Corn-measurer.

18. 14. Seventeenth Chapter:

15. *Beware of covering up(?) the waze-measure,*
16. *to falsify its fractional parts;*
17. *do not the injustice of (?) Wbn-nakht(?);*
18. *cause it not to be empty in its belly;*
19. *let it measure according to its size precisely (?),*
20. *thy hand clearing exactly.*
21. *Make not for thyself a bushel-measure of two capacities,*
22. *(for then) thou wilt make (only) for the deep waters;*
23. *the bushel is the Eye of Rē⁴,*
19. 1. *its abomination is he who abstracts.*
2. *A corn-measurer who multiplies cheating,*
3. *his eye seals⁵ (the accusation) upon him.*
4. *Do not receive harvest-dues from a farmer*
5. *and then (?) tie up (?)⁶ a document against him, that he may be injured;*
6. *conspire not with the corn-measurer,*
7. *nor play the game⁷ of "Arranging the Interior."*
8. *The floor for threshing barley is greater in Power*
9. *than an oath by the Great Throne.*

¹ *Such mk*, v. BRÜGSCHE, *Wb. Suppl.*, 575, 1021.

² *T-n* *nb* **ta-nwā* might perhaps be an expression for stucco, bronze or other material used as a basis for gilding": Grapow *apud* Lange suspects the true reading to have been *tpn* "fayence."

³ *Ktm*, *op. cit.*, 1237 = late Hebrew *כָּתָן*, "gold," "pure gold."

⁴ *Hr stn-f* is consuetudinal, *ḥr stn-f*.

⁵ Perhaps a strange spelling of *mr* "bind." *ḥ* has little phonetic value in late times.

⁶ *Hl* spelt as in demotic. The game is not otherwise known, but its general nature is fairly obvious.

18. 15, 16. Or "misusing the *w.* and falsifying, etc."
18. 17. Wbn-nakht may be the villain or hero of a legend; or "do not violence in the shining of the Giant," the Giant being the name of a constellation in the star-tables of the tombs of Ramesses VI and IX, perhaps rising in harvest time or otherwise.
18. 18. *I.e.* by means of a false bottom?
18. 20. *I.e.* "striking (the measure)," or perhaps "emptying."
18. 21. Or perhaps "of double capacity."
18. 22. An expression for wasted labour, as in 17. 12.
18. 23. "The Eye of Rē" seems to be another name for the *waze* or "Eye of Horus," which would represent the quadruple *heqat* or bushel as well as the single *heqat* of ten *hins*.
19. 4. "A rent" or "the harvest."
19. 6. *Lit.* "make not one with."
19. 8. "Supernatural power" or "sanctity," see the note to 7. 19, and below, p. 230.
19. 9. Or "in the Great Place," in any case referring to the sanctuary or the seat of the deity.

This seems to consist of three six-line stanzas against cheating with the corn-measure; the first on the *waze*-measure, the second on the bushel-measure, the third against unfair dealing at the threshing-floor.

18. 21-19. 1; cf. Prov. xx. 10, 23.

Chapter XVIII. Over-anxiety.

19. 10. *Eighteenth Chapter:*

11. *Lay thee not down at night fearing the morrow;*
12. *when day appears, what is the morrow like?*
13. *Man knoweth not how the morrow will be,*
(The events of the morrow are in the hand of God);
14. *God is (ever) in his success,*
15. *Man is (ever) in his failure.*
16. *The words which men say are one thing,*
17. *The things which God doeth are another.*
18. *Say not "I have no crime,"*
19. *nor labour to seek strife (sic).*
20. *Crime belongeth to God,*
21. *it is sealed with his finger.*
22. *There is no success with God,*
23. *nor is there failure before him;*
20. 1. *if he turn him to seek success,*
2. *in a moment the man (?) mars it.*
3. *Be resolute in thy heart, make firm thy mind;*
4. *steer not with (?) thy tongue;*
5. *the tongue of a man is the rudder of a boat,*
6. *(but) the Universal Lord is its pilot.*

19. 11. The *Handwörterbuch* of Erman and Grapow attributes also the meaning "sich bereiten" to *hry*, so perhaps "preparing for the morrow."

19. 12. Dr. Blackman questions whether the peculiar use of *hꜥt* and *dwꜥ* for "the previous night" and "the morrow" respectively (as pointed out by SETHE, *Zeitrechnung*, III, 132, in *Gött. Nachrichten*, 1919-20) be not applicable here.

19. 14-17. For this bold rendering (towards which Budge's translation tended, though all others were far from it) I am indebted to Sethe's article "*Der Mensch denkt, Gott lenkt*" bei den alten Ägyptern in *Gött. Nachrichten*, 1925, 141-147. Sethe compares Prov. xvi. 9 (and xix. 2), from which is derived the maxim *Homo proposuit sed Deus disponit* in THOMAS A KEMPIS, *de Imitatione Christi*, I, xix, translated in our proverb "Man proposes, God disposes," see MURRAY, *New English Dictionary*, s.v. "dispose," 7.

19. 18. I.e. "it is through no fault of mine" (?).

19. 19. "Strife (with God ?)" or "confusion" seem inappropriate, and "anxiety," "worry" are hardly admissible meanings. Lange emends "to approach unto God."

20. 1. "He" would seem to refer not to "God," but to "man" understood.

The leading idea seems to be "be not over-anxious, be resolute, but accept the dispensations of God." The chapter may be divided as above into five quatrains, with the help of the extra line after 13 postulated by Lange; this seems to give the best arrangement. Otherwise three pairs may be made of the seven lines 11-17 by combining 14 and 15.

Chapter XIX. Speech in the Law-court.

20. 7. Nineteenth Chapter :

8. *Enter not the law-court before a noble,*
9. *and then falsify thy words ;*
10. *go not up and down with thy reply*
11. *when thy witnesses are set up¹.*
12. *Do not labour (with) oaths by thy lord,*
13. *(with) speech of the place of inquisition.*
14. *Tell the truth before the noble,*
15. *lest he get power over thy body ;*
16. *(then) if next day thou come before him,*
17. *he will consent to all thou sayest ;*
18. *he will tell thy statement within before the Council of Thirty ;*
19. *it will be kindly (?) another time also.*

20. 10. "backwards and forwards," cf. Pap. Lansing, 2, 7, 4, 2-3 (Blackman).

20. 12. Or "fabricate oaths."

20. 13. The language of the "examination place" of criminals would be unmeasured protestations of innocence (followed in due time by confession of guilt).

20. 15. To torment it.

20. 16. = 26. 4.

20. 18. The high council of thirty judges, SETHE, *Von Zahlen und Zahlworten*, 40.

20. 19. This line is curiously like 15. 17, 18.

Twelve lines on conduct in the law-court, falling perhaps into two six-line stanzas.

¹ *Sethe mtr. Max. Any.* 16, 4.

Chapter XX. Professional Honesty.

20. 20. *Twentieth Chapter:*







































21. *Do not pervert(?) a man in the law-court,*
 22. *nor disturb the just man(?).*
 21. 1. *Give not (all) thy attention to one that is clothed(?) in shining white*
 2. *and accept him in rags¹;*
 3. *Receive not the gift of a strong man,*
 4. *nor repress² the weak for him.*
 5. *Justice is a great gift of God,*
 6. *he will give it to him whom he will;*
 7. *verily the strength of him who is like unto him,*
 8. *it saves the poor wretch from his beating.*
 9. *Make not for thyself false documents³;*
 10. *they are a gross treason(?)⁴ (worthy) of death,*
 11. *they are great oaths of szf -tr,*
 12. *they are for enquiry by the informer.*
 13. *Do not falsify the bread(?) upon the record,*
 14. *and so mar the design of God;*
 15. *do not find for thine own self the Power of God;*
 16. *without (the decree of) Shay and Renent.*
 17. *Hand over property to its owners,*
 18. *and seek life for thyself.*
 19. *Let not thy heart-build in their house,*
 20. *(for thus) thy bone(s) are for the execution-block.*

20. 22. Lange translates "bend not justice," but "justice" should be fem.

21. 13. Lange considers that the word translated "bread" here stands for something entirely different. It might perhaps mean "income."

21. 15, 16. Perhaps meaning "do not bring on yourself God's wrath by your own provocation apart from ill-luck." Or "do not calculate for thine own self the Might of God as if there were no Shay or Renent," as Erman and Lange. See above, 9. 11.

A six-line stanza between two of four lines concerning honesty in the law-court; two four-line stanzas on honest accountancy.

¹ The meaning is very uncertain. Read  and beyond we have      , which may be connected with    , "clothe"; or it may be a mistake for *ds*, "garment," as Erman and Lange have taken it. One would expect the following *mtc-k* to carry on the negative, and that would be easy if we could translate "nor refuse him in rags," but *bc* seems to mean the opposite of "refuse." Read                           

Chapter XXI. Reticence.

21. 21. Twenty-first Chapter:

22. 1. *Say not "Find¹ me a strong chief,
 2. for a man in thy city hath injured me²";
 3. say not "Find me a redeemer³,
 4. for a man who hateth me hath injured me."
 5. Verily thou knowest not the designs of God,
 6. thou canst not realise (?) the morrow.
 7. Sit thee down at the hands of God;
 8. thy tranquillity will overthrow them.
 9. Verily a crocodile which is void of proclaiming,
 10. inveterate⁴ is the dread of it.
 11. Empty not thine inmost soul⁵ to everybody,
 12. nor spoil (thereby) thine influence;
 13. spread not thy sayings about to others,
 14. nor associate⁶ to thyself one who lays bare his heart.
 15. Better is a man that (hides) his report within himself
 16. than he who tells a thing to disadvantage.
 17. One does not run to reach perfection;
 18. one does not throw (?) to injure himself(?).*

22. 4. Or "whom I hate."

22. 9. "Void of proclaiming" is a good example of far-fetched artificial expression, standing for "sound-less," "dumb."

22. 15. Lange supplies *hp*, "hides"; "that reports within himself" is the text as it stands; or, omitting the first *ꜥ*, "whose report is in his belly."

22. 18. Or "invent" for "throw."

Apparently four quatrains with a couplet between the second and third. The second quatrain is repeated at the end of Chapter XXII.



With 22. 1-8, cf. Prov. xx. 22: with 13, 14, Prov. xx. 19, and with 15, 16, Prov. xii. 23.

¹ *Gm-nl* can hardly be "I have found" (as read by others) in this papyrus, which seems not to use the form *sdm-nf*.

² At this period the object-pronoun I sing. may be written *wp*², or may be omitted in writing, and lines 7-8 seem to necessitate this translation rather than "for I have injured a man in thy city."

³ *Stt*, cf. *peqcorre*, "redeemer."

⁴ *Isi* must be the adjective "old," not the verb "be light."

⁵ Lit. "thy belly." Observe the *ꜥꜥꜥꜥ* , probably for *ꜥꜥꜥꜥ* rather than *ꜥꜥꜥꜥ* .

⁶ *ꜥꜥꜥꜥ*.

Chapter XXII. Debate.

22. 19. *Twenty-second Chapter:*

20. *Plot (?) not against thine opponent in debate*
21. *nor (make) him tell his talk of hearts;*
22. *leap not to go in and meet him*
23. 1. *when thou hast not seen what he doeth,*
2. *Thou shalt perceive first from his reply,*
3. *and be still, (then) will thine attainment come.*
4. *Leave it to him that he may empty his inmost soul;*
5. *know how to sleep, and he will be comprehended.*
6. *Seize his feet, do not slight (?) him;*
7. *fear him, do not neglect him.*
8. *Verily thou knowest not the designs of God,*
9. *thou canst not realise (?) the morrow.*
10. *Sit thee down at the hands of God;*
11. *thy tranquillity will overthrow them.*

22. 20. Or "Challenge not," "Do not draw out."

23. 3. Cf. 17. 1.

23. 4. *Lit.* "his belly."

Ten lines on conduct in debate—to let your opponent talk and treat him with great respect. They are followed by the second quatrain of the preceding chapter; "them" at the end is only vaguely applicable to this context.

Chapter XXIII. Spare the Official's Hospitality.

23. 12. *Twenty-third Chapter:*

13. *Eat not bread in presence of a noble,*
14. *nor apply thy mouth at the beginning.*
15. *If thou art satisfied (with) false munchings,*
16. *they are a diversion in thy saliva¹.*
17. *Look at the cup² that is before thee,*
18. *and let it do thy need.*
19. *Even as a noble is great in his office,*
20. *he is like as a well aboundeth (in) drawings (of water).*

23. 15. Cf. "Bread gained by fraud," Prov. xx. 17, and "bread of deceit," Prov. xxiii. 3. Or perhaps "If these are sated with unjust food, it is (but) a diversion," etc.

23. 20. Apparently a reminder of the expenses of labour, material and time attached to high office.

Four couplets: to abstain from the food which would be offered in an interview with a great man. Prov. xxiii. 1-3 seems somehow connected with this, though the ideas are all changed.

¹ There must be some corruption: read *at (s)dy-hr*; or read *at(dy)-hr*, "amuse thyself with thy saliva" (instead of eating).

² N.B. *gly* is always masc. in D'Orb. (13. 9, 14. 2), as here.

Chapter XXIV. The Secretary.

23. 21. Twenty-fourth Chapter:

22. *Hear not the replies of a noble in a house¹,
 24. 1. and then report him to another² without;
 2. let not³ thy speech be carried abroad⁴,
 3. lest thine heart be bitter(?)
 4. The heart of man is the nose of God;
 5. beware lest thou neglect it.
 6. A man who stands by the side⁵ of a noble,
 7. verily his name should not be known.*

24. 2. Or "thine opinion," "evidence."

24. 3. "heart" in the sense of conscience.

24. 4. Or "the beak of God," referring to Thoth; apparently meaning that a man's conscience is as it were the organ by which God discerns right and wrong.

Four couplets: not to proclaim aloud the private talk of a noble.


Chapter XXV. Respect for Infirmary.



24. 8. Twenty-fifth Chapter:

9. *Laugh not at a blind man, nor tease a dwarf,
 10. nor mar the design of a lame (?) man;
 11. tease not a man who is in the hand of God,
 12. nor be fierce of countenance against him when he has transgressed.
 13. Verily man is clay and straw,
 14. God is his fashioner;
 15. he pulls down and builds up each day;
 16. he makes a thousand dependents at his will,
 17. (or) he makes a thousand men into overseers (?)
 18. when he is in his hour of life.
 19. How happy is he who hath reached the West
 20. when he is safe in the hand of God.*



24. 10. The same phrase used of God as here of a lame man 21. 14; with the latter it probably means "play some practical joke to hinder his movements."


24. 11. Here probably meaning mad or ill; but cf. 9. 5, and 24. 20. Lange refers to the common opinion in modern Egypt that the imbecile is a special friend of God (see LANE, *M. and C. of the Modern Egyptians*, on "Saints" in Ch. X).

¹  is clear.

² The Turin writing tablet, the text on which begins at this line, enables us to correct the senseless , "thee," of the papyrus to , "another."

³ *m dr*, see above, p. 200, note 1.

⁴ Correct the papyrus  with the help of the tablet to .

⁵ .

24. 13. The materials from which bricks are made.*

24. 18. The meaning of this is obscure.

A new collation of the fragmentary Turin text might give some help, but its agreement in this chapter is generally close, except for details of spelling and some obvious errors.

Respect physical infirmity allotted by God: a quatrain followed by a six-line stanza, to which a couplet in praise of death is added at the end.

Chapter XXVI. Conduct towards Seniors in Society.

24. 21. *Twenty-sixth Chapter:*

22. *Sit not in the beer-house,*

25. 1. *and then join (?) one senior to thyself¹,*

2. *whether he be young (but) great in his office,*

3. *or old by birth;*

4. *associate with thyself a man of thine own rank;*

5. *Re^c is helpful from afar.*

6. *(But) if thou see one greater than thyself outside*

7. *and attendants² following him, do (him?) reverence;*

8. *give a hand to an old man when he is sated³ with beer,*

9. *reverence (?) (him) as (?) his children (would)⁴.*

10. *The strong arm⁵ is not softened (?) by being uncovered;*

11. *the back⁶ is not broken by bending it;*

12. *poverty will not be made for a man when he says the pleasant thing,*

13. *any more than riches⁷ when his speech is straw(?)⁸.*

14. *A pilot who sees from afar,*

15. *he will not make his boat a wreck⁹.*

25. 5. This reminds one of the fate of Icarus.

25. 6, 7. Turin seems to give "If one older than thou go outside, a petitioner (?) following him."

Behaviour in the beer-house—seek company of your own standing, but be polite. A stanza of six lines followed by two quatrains and a finishing couplet.

¹ The original is clear.

² Note the rendering of the qual. *cnv*.

³ 

⁴ 


⁵ 


⁶ 


⁷ 

⁸ 


⁹ 

¹ "Straw," i.e. dry and harsh (?); cf. the use in Pahari, Pl. vii, row 3. In *Max. Any.* 22. 7, there is the same opposition of *adm* and *dhst* , the latter without any sign of its representing vegetable matter.

² *cy* is "kick," so *cy*  perhaps "strike a rock," or else "upset."

³ *See*  1 1.

⁴ The Turin tablet ends here.

⁵ 

Chapter XXVII. Submission to the Old.

25. 16. Twenty-seventh Chapter:

17. *Curse not one older than thou,*
 18. *for he hath seen Rē^c before thee;*
 19. *cause him not to accuse thee¹ to the Aten at its rising,*
 20. *saying "Another, a youth, hath cursed an old man";*
 21. *very painful before Rē^c*
 26. 1. *is a youth who curses an old man.*
 2. *Let him beat thee, with thy hand in thy bosom;*
 3. *let him curse thee, while thou keepest silence.*
 4. *If next day thou come before him,*
 5. *he will give thee bread without stint.*
 6. *The food of a hound is (the affair) of his master,*
 7. *and he barks unto him that gives it.*

25. 19. "the Aten" is of course the sun's disk.

26. 4 = 20. 16.

26. 7. Or "for the giving of it." Lange would correct *ḥq* and translate:

"The client is the hound of his patron,
 He barks at the giver of it (i.e. bread)."

Submit quietly to the old. Twelve lines in two stanzas, the last couplet obscurely connected.

Chapter XXVIII. Benevolence.

26. 8. Twenty-eighth Chapter:






9. *Identify (?) not a widow when thou hast caught her in the fields,*
 10. *nor fail to be long-suffering (?) to her reply.*
 11. *Pass not over the stranger² (with) thine oil-jar,*
 12. *that it may be doubled before thy brethren¹.*
 13. *God loveth the happiness of the humble*
 14. *more than that the noble be honoured.*

26. 9. Apparently when caught trespassing. For *gm*, which may be a legal term if it is not an error of the scribe, one may perhaps consider the doubtful use in I Kham. 3. 6.




26. 10. Or "attentive."

26. 12. Or "but let it be doubled."

Three couplets on consideration for those in bad circumstances.

¹  , the *f* is certain;   2 sing. obj. for  as in demotic (I Kham. 3. 12, etc.).

² *Ddr*, see Gardiner's note on *Sinuhe*, I. 202.

Chapter XXIX. The Ferry.

26. 15. *Twenty-ninth Chapter:*

16. *Hinder (?) not people from crossing a river,*
17. *when thou hast room in the ferry-boat;*
18. *if a steering-paddle be brought to thee in the midst of the deep waters,*
19. *thou wilt bend back (?) thy hands to take it.*
20. *There is no abomination (for thee to suffer) from God*
27. 1. *if a sailor doth not welcome (thee).*
2. *Make not for thyself a ferry-boat upon the river*
3. *and then labour to seek its fare¹;*
4. *take the fare from the person of wealth,*
5. *and welcome him who hath nothing.*

26. 18-20 are full of difficulties. L. 20 perhaps combats some superstition.

27. In the original this page is quite clear.

Ten lines on conduct in crossing a river, of which the last four form a quatrain.

Chapter XXX. Epilogue.

27. 6. *Thirtieth Chapter:*

7. *See for thyself these thirty chapters,*
8. *they please, they educate;*
9. *they are the foremost of all books;*
10. *they instruct the ignorant.*
11. *If they be read before the ignorant,*
12. *he will be cured (?)² by reason of them.*
13. *Fill thyself with them; put them in thy heart,*
14. *and be an interpreter of them, 15. explaining as a teacher.*
16. *As to a scribe who is experienced³ in his office,*
17. *he will find himself worthy (?)⁴ to be a courtier.*

Epilogue of ten lines, the first eight recommending the book, followed by a couplet pointing out the distinguished career open to experienced scribes. Lange would add two more lines, supposing one to have been omitted between 14 and 15 which I have joined together; perhaps it should be thus:

"(expert in reading)

15. interpreting as a teacher."

27. 7. Cf. Prov. xxii. 20.

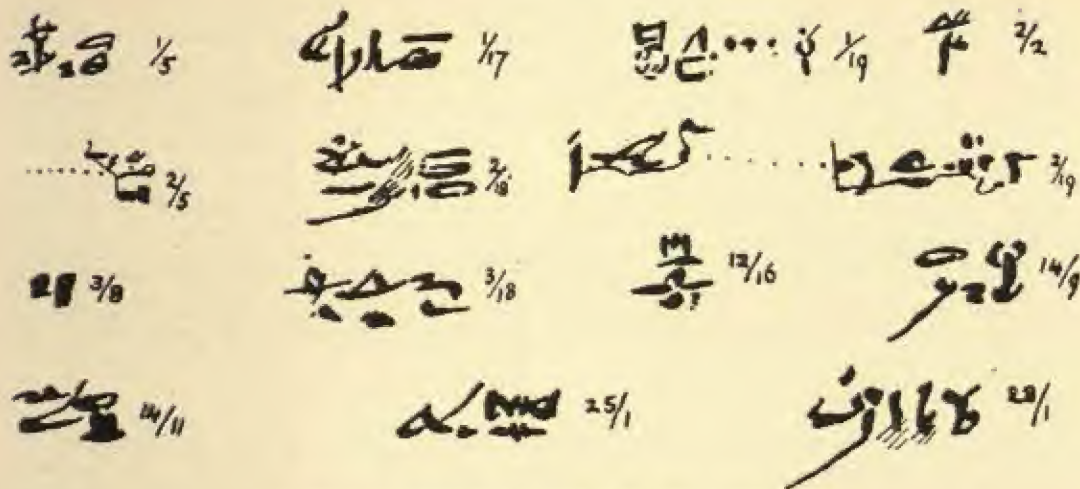
¹ χ is a mistake for \times in the det. of *mip*.

² *Tur*, cf. 15. 7.

⁴ *m-šl mnyga*, cf. SETHE, *Zeitschr. f. äg. Spr.*, XLVII, 143.



³ $\frac{1}{2}$ not $\frac{1}{3}$.

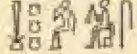
Colophon.

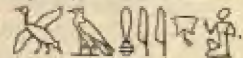
27. 18. *That is its end.*28. 1. *Written¹ by Senu² son of the divine father Pemū³.*

Corrections of the facsimile of B.M. Pap. 10474, recto.

It appears that several wise men of Egypt bore the name Amenophis, and we have in consequence to distinguish the author of the Teaching from (1) another Amenemopi, the author of some proverbs written on the back of the same papyrus¹, whose titles seem to prove him a different person, and from (2) Amenhotp son of Hapi, a learned scribe and minister of Amenophis III, who in late times was actually worshipped as a divinity at Thebes and Memphis and was known to Josephus as Amenophis son of Paapis, just as king Amenhotp appears in Manetho as Amenophis. The name of this Amenhotp however would be more strictly and conveniently Graecized as Amenotbes or Amenotes, under which name some sayings attributed to him have been preserved on a Greek ostrakon from Thebes².

¹  or  ³⁴ "by the writing of M son of N" is the regular formula of the scribe in legal documents of the "abnormal" series throughout, from Shabako to the middle of the reign of Amasis II. It is also found in the earliest "normal" hieratic-demotic of Psammetichus I (Rylands Papyrus). Again the *m* seems still traceable in demotic of Amasis II and Darius, though in most cases wholly absorbed. It is quite possible therefore that a full writing in even later hieratic might have restored the *m*. Thus the occurrence of *m* here does not quite preclude a wide uncertainty as to the date of the copy.

² Dr. Gardiner has kindly reminded me of the name  in PETRIE, *Koptos*, Pl. xx (temp. Ptolemy II), which fixes the reading here.

³ 

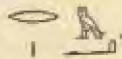
⁴ BUDAK, *Facsimiles of Hieratic Papyri*, Second Series, 18.

⁵ WILKEN in *Aegyptiaca*, *Festschrift für Georg Ebers*, 143. See also SETHE, *Amenhotep, der Sohn des Hapu*, op. cit., 107; DAWSON, *Amenophis the Son of Hapu in Aegyptus*, VII, 113-138.

From the Preface we learn the following names in the author's family:

Kanakht
|
Amenophis — Tewosri
|
Harnaḳher

Kanakht, "Strong Bull," seems not to be found elsewhere as a name; but it is a regular constituent of the Horus-title of kings throughout the New Kingdom and onward to the Twenty-third Dynasty. Amen(en)ope occurs from the middle of the Eighteenth Dynasty¹ to Ptolemaic times. Tewosri is a frequent name of women in the Eighteenth Dynasty and was borne by a queen at the end of the Nineteenth. The only instance of Harnaḳher recorded by Lieblein dates as far back as the Twelfth Dynasty², and it seems to reappear first in the Saite or Persian period³, and is common in early Ptolemaic documents with the Greek form *Ἀρμαχορος*.

These names give us singularly little help in determining the date of the composition. They conduct us at once to a period not earlier than the Eighteenth Dynasty, but leave us in doubt thereafter although collectively they give the impression of a later date, say Twenty-first to Twenty-sixth Dynasty. It is of course conceivable that the names are fictitious. As to the copies that survive, their age is also not easy to fix. Lange on pp. 14-16 of his edition has collected evidence of late date in the orthography, which has peculiar features⁴. The materials existing of this age are very scanty, and Dr. Gardiner's assignment of the writing on the tablet to the end of the Twentieth Dynasty probably meant no more than that it belonged to the extreme end of the series with which he was dealing. The tablet indeed, though very incorrectly written, happens to have little in the orthography of the words by which it could be differentiated from other writings in New Egyptian. The names of the writer of the papyrus, Senu, and of his father Pemū, in the Colophon are helpful, for Pemū appears first late in the Twenty-second Dynasty and is common thereafter to Ptolemaic times, while the only other instance known of Senu is Ptolemaic (Senusheps). On the whole it may be said that the script and the orthography of the papyrus (5. 10 ) seem to take us (as far as our present evidence goes) to the Twenty-fifth Dynasty as the earliest date, and the reign of Darius as the latest, and the tablet if really copied from it by dictation⁵ cannot be earlier than the papyrus.

The titles attributed to the author, with the exception of 1. 13, 2. 3, are not found on the monuments or in other papyri. They seem to be paraphrases in literary, poetical form. From them we learn that Amenophis was in charge of the land and of corn, but whether for the whole of Egypt or for a district only does not appear. He registered and leased land for the king and for "all the gods," and he raised and apportioned the corn-dues and perhaps saw to the distribution of the corn (in payment of salaries or grants). With cattle on the other hand he evidently had nothing to do. He clearly belonged to the region of Panopolis and Abydos which lie opposite each other along the Nile; in each of these cities

¹ LIEBLEIN, *Diet. de noms. hiérog.*, suppl., 1937.

² *Op. cit.*, suppl., 1506.

³ GRIFFITH, *Rylands Demotic Papyri*, III, 457; GAUTHIER, *Cercueils*, No. 41064.

⁴ Add the spellings of *grst* 6. 6, *phd* 16. 21, *sdw* (?) 21. 1, which seem connected with usages first introduced into hieroglyphic in the Twenty-sixth Dynasty.

⁵ See above, p. 193.

he possessed a sepulchral monument, and he had probably been a pious benefactor to their temples.

As usual, the instruction is given by a father to his son. The son, Harma'kher, has a variety of priestly titles, connecting him with the temple of Panopolis, but again not easy to find in other documents. His mother's titles are more ordinary, but the names of the deities whom she served give little clue as to the district whence she came. The little son, already holding priestly offices, would if he continued in that career have had plenty of opportunities to display the piety and tranquillity enjoined by his father; whether as a result of these instructions he proceeded to a high position in the state is not recorded, although the prospect of such advancement is held out in the last words of the Teaching.

The arrangement of the written text in separate lines of poetry is unusual, but an example is known as old as the Twelfth Dynasty in the Kahun Hymn to Sesostri's III, and two instances in demotic of about the second century B.C. and the first century A.D. are furnished by the so-called Poème Satyrique and the Leyden Moral Papyrus translated by Boeser¹. The division of the teaching into numbered chapters is unique in a hieratic text, but is found again in demotic in the same Leyden Papyrus, which contained twenty-five lessons of moral sayings.

As to the form of the poetry, there is no trace of rhyming or of definite measures. The poetical effect is produced by parallelism. The lines run throughout in couplets; the few apparent exceptions seem to be due to accidental omission of a line or to writing two lines in one or even one in two. The pairs of lines can often be grouped into larger divisions; the commonest of these is the quatrain, but groups of six, eight or more lines seem also to occur. Lange however in his very able Introduction (pp. 11 and 12) recognizes only the couplet and the quatrain.

The Teaching has most fortunately come down to us complete from end to end, enabling us (so far as we can understand it) to judge fairly its character and scope. Amenophis has had a special message to convey. He has put aside the commonplaces of advice, and whole regions of moral warning are left untouched; but he draws on his personal experience as an administrator of land to teach certain lessons that he wished to impress upon his son, and at the same time set up a higher standard of morality than his predecessors who are known to us had done. The description of the book in the Preface promises both success in life and moral welfare to the obedient listener; in other Egyptian teachings the practical quite overshadows the spiritual, but in Amenophis' teaching religion and morality are the chief motives. The first chapter emphasizes the moral results to the learner; the second chapter teaches a very high level of humanity, even to rescuing the evil-doer when at the last gasp; and so on. The ideal of Amenophis is Tranquillity. The "tranquil" man, content with his lot, pious and benevolent, is opposed to the "passionate" man, noisy and unscrupulous, ever reaching after gain, a nuisance to his neighbours and led into all kinds of wrong-doing by his ambition².

Several divinities are referred to in the Teaching, and the references have no little

¹ For the latter see BOESER, *Transcription und Uebersetzung des Papyrus Insinger*, in *Oudheidkundige Mededeelingen*, Leiden, 1922.

² *Gr*, which is used of stillness both in voice and action, is the virtuous, "tranquil, modest, pious (?)," person as opposed to the vicious *imn* "hot," i.e. "passionate," person, see ERMAN, *Denksteine* (*Sitzungsberichte Berlin. Ak.* 1911), 1109, *Die Literatur der Aegypter*, 296, 378, 383, etc., and *O.L.Z.* 1924, 241.

interest for the student of Egyptian religion. Some are clearly connected with the profession of a scribe, others are of a more general nature.

1. The Sun-God. Rē, "the Sun," to whose Aten or visible disk at its rising good men address their prayers in the morning, seems to be the supreme deity whose approval all good people desire to win.

10, 12-15. (Instead of seeking wealth.)

Thou shalt pray to the Aten when he rises,
saying "Grant me prosperity and health,"
and he will give thee thy needs in life,
and thou wilt be safe from fear.

25, 17-26, 1. Curse not one older than thou,
for he hath seen Rē before thee;
when he hath accused thee to the Aten at its rising,
saying "Another, a youth, hath cursed an old man";
painful, yea painful before Rē
is a youth who curses an old man.

7, 8. (The tranquil.)

They say "The chiefest thing is the approval of Rē."



A pithy proverb is probably to be seen in

25, 5. Rē is helpful from afar

(implying "but dangerous to approach").

The avenging uraeus on the brow of Rē and Rē's enemy the gigantic Apophis serpent, both of them fearsome, are employed to illustrate the advantage of acquiring a good reputation in

10, 19, 20. One acclaims the Uraeus
and spits on Apop.

The corn-measure which played so large a part in the life of an Egyptian scribe is the Eye of the Sun-God and is called the *waḥ*, i.e. the Eye of Horus or of Rē . This wholesome doctrine for promoting honesty was current long before, for, as the late Georg Möller pointed out, the symbols for the subdivision of the corn-measure, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{16}$, $\frac{1}{32}$ and $\frac{1}{64}$, were in quite ancient times identical with or assimilated to the six elements which constitute the picture .

2. Fate. Shay ("Ordainer") and Renent ("Nurse," later pronounced Ermûte), whose names were Graecised as Psais and Termuthis respectively, were god and goddess of fate and also of the harvest. Renent appears in the harvest and vintage scenes in tombs of the New Kingdom as a cobra (e.g. in DAVIES, *The Tomb of Two Officials*, Pl. xxx). As representing destiny both Shay and Renent are shown in the picture of the Psychostasia (Ch. CXXV of the Book of the Dead) in the Papyri of Any and of Anhai; in the former they are in human shape, in the latter they are the human-headed birth-bricks of man's fate.

Amenophis says: "

9, 10-13. Cast not thy heart after riches;
there is no ignoring of Shay and Renent.
Place not for thyself thy thoughts (on things) outside;
every man is destined for his hour (or "belongs to his hour").

¹ MÖLLER, *Zeitschr. f. äg. Spr.*, XLVIII, 99; cf. PEET, *Rhind Mathematical Papyrus*, 25.

21. 13-16. Do not falsify the income(?) upon the record,
and so injure the plans of God.
Find not out for thine own self the Wrath (or Power?) of God,
without (the decree of) Shay and Renent.

In both passages they are combined to represent Fate.

3. Khnum. He takes a place as the moulder of man on the potter's wheel or the moulder's table, no doubt a popular conception, illustrated in the temple of Dêr el-Bahri¹ and on temples of the Graeco-Roman age. He was the chief god of Shashetep (Hypselsis) where Shau (*sic* Psais, Destiny) was appropriately associated with him as a subordinate deity, according to a fragmentary inscription in a tomb of the later New Kingdom².

12. 15-17. (As to the passionate man.)
Would that Khnum might bring in indeed, indeed (?),
the potter's wheel for the fiery-mouthed,
to mould and burn hearts (like vessels)
(and reform his ways!).

4. The scribe-god. Thoth, the god of invention and learning and of the whole art of the scribe, whose ape was figured in every government office to watch and regulate the doings of the clerks both great and small, holds a prominent place in Amenophis' teaching. His name occurs once in Chapter XVI (18. 2), and the Ape is mentioned in the same context and also in 17. 9.

Thoth as inventor and the guardian Ape:

17. 22-18. 3. (Cheat not with weights and measures);
The Ape sitteth by the balance,
his heart being the plummet.
Where is a god so great as Thoth,
he that discovered these things, to make them?
Fashion not for thyself deficient *kite*-weights;
they abound in armies(?) by the Power of God.

Another manifestation of Thoth, the Ibis, is introduced in

17. 7-12. (Write the truth.)
The beak of the Ibis is the finger of the scribe;
beware of disturbing it.
The Ape dwelleth in the House of Khmûn (i.e. Hermopolis),
(but) his eye travels round the Two Lands;
if he sees him that perverts with his finger,
he takes away his provisions in the deep waters.

May not the "eye" of the Ape here be the Moon? Anyhow Thoth was identified with the Moon, and in Amenophis' Teaching the Moon, shining in the night, is the revealer of dishonesty.



When the passionate wrong-doer is at the point of death, Thoth is called upon (at the judgment of Osiris?) to prosecute him (a difficult passage):—



¹ NAVILLE, *Deir el-Bahari*, II, Pl. xlviii.

² GRIFFITH, *The Inscriptions of Siût and Dêr Rîfe*, Pl. 18, tomb iv, line 68.

4. 19. Thou Moon, bring forward his crime!

Also, 7. 18-19. (he who encroaches on another's land)
if he snare by false oaths,
is lassoed by the Power of the Moon.

5. God in general. Of expressions for a deity without specifying the name of any particular one, the commonest is "the God" . "God," or possibly "a god," , is not uncommon, and the two forms seem to belong to different phrases rather than different ideas.

"The hand"  is always "of the God," 9. 5, 14. 1, 10. 22, 24. 11, 20, 26. 20. Likewise "the hands"  "of the God," 22. 7, 23. 10.

But we find "nose of God" (i.e. the beak of the Ibis?), 24. 4; "Power of God," 11. 5, 18. 5, 21. 15; "design of God," 21. 14, 22. 5.

Further "abomination of the God," 13. 16, 15. 21; but "hated of God," 14. 2; "God loveth," 26. 13.

We find also "one propitiates God," 8. 11, and "gift of God," 21. 5.

But all other expressions are with "the God": "the God knows how to reply," 5. 17; "bushel that the God giveth thee," 8. 19; "perversion before the God," 18. 11; "the God is (ever) in his success," 19. 14; "things which the God doeth," 19. 17; "Crime belongeth to the God," 19. 20; "the God is his fashioner," 24. 14.

Another expression for the deity, "The Universal Lord," occurs twice: "beware of the Universal Lord," 8. 14; "the Universal Lord is its pilot," 20. 6.

A very unusual and unexpected designation is simply "the Lord" in "Power of the Lord," 8. 11. The sentence in which it occurs is so obscure that one suspects either an error of the scribe or a special signification "the Power of the owner of the property," i.e. the magic power conferred by ownership, a quite conceivable idea. Thus in 19. 8, 9 we read "The threshing floor is mightier in Power than an oath by the Great Throne (of the god)"; I take this to mean protective or avenging power; Lange however interprets the saying as a proverb on the irresistible temptation to steal corn.

Of old mythological nomenclature we find the Tēi (Duat or Underworld) named in 10. 1, but not in a religious sense; the "West" is referred to as the necropolis or abode of the dead in 24. 19.

The wise men of Ancient Egypt saw beyond the popular beliefs and local cults of their country; no other book of theirs yet discovered has made so much concession to these beliefs as that of our Amenophis, whose teaching is moreover full of religious piety. Lange may be right in making even Amenophis' theology essentially monotheistic, however much the sage used popular superstitions to enforce his ideas, and it would be profitless in most cases to seek for individual deities where he names only "God" or "the God."

Professor Erman suggested that at some time a Hebrew or Aramaic version was made of the proverbs of Amenophis and that the compiler of the Biblical Book of Proverbs utilized this translation but corrupted the sense in borrowing; Dr. Gressmann shows however that the borrowing was not a direct copying of words, but an absorption of ideas which then reappeared in new forms according to requirements. The outstanding example in Erman's view was the word "thirty" which he thought a useless and meaningless survival

in its new context. But the explanation is this: Amenophis' Teaching had been arranged in thirty "houses" or chapters; hence the Hebrew compiler of the third section of Proverbs adopted that number as a basis for his collection, which he proceeded to make up of thirty maxims, and thus quite appropriately refers to them in a phrase similar to that used by Amenophis in referring to his own composition. Professor Gressmann points out that when the Hebrews were becoming civilized under Solomon and his successors, they looked especially to Egypt and Babylonia for instruction in the arts of life; the royal scribe, such as Hezekiah's Shebna, was a well-educated slave from abroad¹, able to advise the king from his books and experience as to the ways of the great world, and to speak, read and write the language of diplomacy, which in Hezekiah's time was Aramaic. He was in fact the Foreign Secretary of State. The mention of "the men of Hezekiah" who "copied out" the fifth section of the Proverbs (Chs. xxv-xxix) gives us an indication of the period when composition of the various constituents of the Book of Proverbs was in active process.

That nations with a pretence to culture in early days had recognized means of understanding each other is to be seen in the cuneiform correspondence of Tell el-'Amarnah and Boghaz Keui, and in the innumerable foreign words that are met with in Egyptian writing of the New Kingdom. Gressmann suggests that the *mahir* of Pap. Anastasi I and other texts of the Nineteenth Dynasty was a soldier-dragoman-scribe who studied foreign languages and geography, not unlike a modern staff-officer².

¹ GRESSMANN, *Die neugefundene Lehre des Amen-em-ope*, 293 ff.

² This is Dr. Gressmann's own comparison used in a conversation that I was privileged to have with him recently in Oxford.

THE HEBREW BOOK OF PROVERBS AND THE TEACHING OF AMENOPHIS

By D. C. SIMPSON.

A considerable number of proverbial sayings appear in the Hebrew Book of Proverbs and in the Egyptian *Teaching of Amenophis* which, by their similarity to each other and their close affinities in ideas and in expression, create a problem of considerable interest for students of the Old Testament. Some of the parallels are such as must occur in the works of sages of all lands and periods. Others, and these are by no means a small minority, are so remarkable and unique in their resemblance to each other that the hypothesis that they at least are essentially related seems to be amply justified: either the Hebrew proverbs in question were borrowed by Hebrew compilers from *The Teaching of Amenophis* or the Hebrew compilers and Amenophis both borrowed them from an earlier work. But all the parallels, when considered in the aggregate, provide a chain of cumulative evidence which compels the unprejudiced student to go further and to formulate the hypothesis that the proverbial literature of the Nearer East knew no national boundaries but was international. It must have been common alike to Mesopotamia and to Egypt: it must have been as gladly welcomed and assimilated by the Hebrews as by their neighbours. The resemblances, moreover, to *The Teaching of Amenophis*, though most numerous in the Book of Proverbs, are by no means confined to that book: traces, some of them clear, others dubious, of the influence of this Egyptian work have been pointed out in all the various types of Hebrew literature which have been preserved in the Old Testament¹.

The new and interesting light thus thrown by this Egyptian book on the origins and affinities of Hebrew literature and civilization has already attracted the attention of several well-known Old Testament scholars in Germany. Adolf Erman in the *Sitzungsber. d. Preuss. Akad. d. Wiss., Phil.-hist. Kl.*, 1924, xv—xvi, 86 ff., Sellin in the *Deutsche Literaturzeitung*, 1924 (Hefte 17 and 26), Hubert Grimme in *O.L.Z.*, 1925, 58 ff., and K. Sethe in *G.G.N.*, 1925, 141 ff., have all made real contributions towards the proper appreciation of the importance of this subject. But the fullest investigation is that of Hugo Gressmann in his article *Die neugefundene Lehre des Amen-em-ope und die vorexilische Spruchdichtung Israels* in the *Zeitschrift für die Alttestamentliche Wissenschaft*, 1924, 272 ff., and in his little book entitled *Israels Spruchweisheit im Zusammenhang der Weltliteratur*, 1925. In both of these he states his views as to the relation of certain sections of the Book of Proverbs and *The Teaching of Amenophis*, the inferences which he draws from the closeness of the parallels (especially those in Proverbs, Chs. xxii.—xxiii.) to substantiate his theories as to the comparatively early date of the sections in which they occur, and his theory of an international, pan-oriental, common stock of proverbial literature.

¹ Gressmann (to whom in these footnotes I shall refer briefly thus: Gress.), for instance, finds important resemblances in the Prophetic Literature of the Hebrews (e.g. Jer. xvii. 5—8), in the Psalter (e.g. Ps. i., cf. A. M. Blackman's essay on *The Psalter in the Light of Egyptian Research* in *The Psalmists*, 1926), in the Historical Literature (e.g. 1 Sam. ii. 6 ff.), in the Legal Literature (e.g. in the Code of Holiness, Lev. xix. 14) and in the Book of Job (e.g. iv. 19).

In the following pages I have set forth, in parallel columns, the passages from the Hebrew Book of Proverbs and from *The Teaching of Amenophis* which are of outstanding importance for the student of the Hebrew Book of Proverbs. They include two or three additional to those already noticed by Gressmann and others, while several to which they have called attention are not included here on account of the merely superficial nature of the resemblances. The translation of the passages from *The Teaching of Amenophis* is that of Professor Griffith to whose suggestion this survey of the parallels owes its origin. The English translation of the Hebrew Proverbs, intended for the use of non-Hebraists, follows as closely as practicable, apart from emendations and a few obvious corrections, the Revised English Version. Deviations from the Hebrew, whether emendations of the consonantal text or changes of the traditional vocalization, are indicated thus: < >. Details will be found in the footnotes as to the emendations adopted, as to the extent of their support, if any, in the ancient Versions, and as to alternative emendations proposed by Toy, Erman, Grimme, Gressmann, etc., wherever they appear to be noteworthy. It is especially interesting to observe that emendations proposed by C. H. Toy, and published as long ago as 1899¹, find remarkable support in *The Teaching of Amenophis*², the first decipherment of which was made as recently as 1922.

The first (but chronologically the last) section of the Hebrew Book of Proverbs is limited to Chs. i.—ix. No important parallels are to be found in *The Teaching of Amenophis*. Their absence is not remarkable, since the greater part of this section is devoted to the exposition of the post-exilic Jewish (and possibly Greek) conception of "Wisdom," to the inculcation of the Hebrew "Law," and to warnings against sexual immorality, none of which, not even the last, is touched on in *The Teaching of Amenophis*. But a few parallels of a general character are noticeable: of these the following will serve as a typical example:

THE HEBREW BOOK OF PROVERBS

Prov. vi. 21. *Bind them continually upon thine heart,*

Tie them about thy neck.

The second section of the Hebrew Book of Proverbs consists of Chs. x. 1—xxii. 16, which are described in x. 1 as "The Proverbs of Solomon"—usually regarded by English scholars as being in origin, to a very great extent, pre-exilic. In this section a number of parallels with *The Teaching of Amenophis* must be noted. Thus we find an interesting parallel:

Prov. xii. 22. *Lying lips are an abomination to Jahveh*
(cf. xi. 20):

But they that deal truly are his delight.

THE TEACHING OF AMENOPHIS

3. 11. *To put them in thy heart is good,*

12. *(but there is) woe to him who neglecteth them;*

13. *Let them rest in the casket of thy belly.*

13. 15. *Speak not to a man in falsehood,*
16. *the abomination of God.*

And *Amenophis* emphasises this four lines further on:

14. 2. *Hated of God is the falsifier of words,*
3. *his great abomination is the dissembler (T).*

The next verse has a parallel in a different section of *Amenophis*:

Prov. xii. 23. *A prudent man concealeth knowledge:*
But the heart of fools proclaimeth fool-
ishness.

22. 15. *Better is a man that (hides) his report within*
himself
16. *than he who tells a thing to disadvantage.*

¹ In the *International Critical Commentary* on the Book of Proverbs.

² See notes below to xxii. 17, xxvii. 14; cf. note to xxii. 21. Gressmann, unfortunately, does not refer to Toy's work.

Three chapters later we find two couplets, the second of them immediately succeeding the first, which have their counterpart in four successive lines of *Amenophis*:

THE HEBREW BOOK OF PROVERBS

- Prov. xv. 16. *Better is little with the fear of Jahveh,
Than great treasure and trouble there-
with.*
17. *Better is a dinner of herbs where love is,
Than a stalled ox and hatred therewith.*

The next chapter gives three proverbs which have parallels in *Amenophis*. The first is:

- Prov. xvi. 8. *Better is a little with righteousness
Than great revenues with injustice.*

The second bears witness to the antiquity and antecedents of the proverb often used to-day, "Man proposes, God disposes":

- Prov. xvi. 9. *A man's heart deviseth his way:
But Jahveh directeth his steps.*

The third is:

- Prov. xvi. 11. *A just balance and scales are Jahveh's:
All the weights of the bag are his work.*

Prov. xvii. 1 must be compared with the quotations from *Amenophis* printed above opposite to Prov. xv. 16 f.

Prov. xvii. 5, however, has a parallel in another part of *The Teaching of Amenophis*:

- Whoso mocketh the poor reproacheth
his Maker:
And he that is glad at calamity shall
not be unpunished.*

THE TEACHING OF AMENOPHIS

3. 5. *Better is poverty at the hand of God
6. than riches in the storehouse;
7. better is bread with happy heart
8. than riches with vexation.*

16. 11. *Better is the praise and (?) love of men
12. than riches in the storehouse;
13. better is bread with happy heart
14. than riches with vexation.*

19. 16. *The words which men say are one thing,
The things which God doeth are another.*

17. 22. *The Ape sitteth by the balance,
18. 1. his heart being the plummet.
2. Where is a god so great as Thoth,
3. he that discovered these things, to make
them?
4. Fashion not for thyself deficient kite-weights;
5. they abound in armies (?) by the power of God.*

while "his Maker" is fully analogous to "his fashioner" in the succeeding lines of *Amenophis*.

To Ch. xviii. 6^b we find a parallel in *The Teaching of Amenophis*:

- And his mouth calleth for stripes.*

12. 5. *He makes an answer worthy of a beating.*

In Ch. xix we find two lines which correspond to the two lines of *Amenophis* which immediately precede those quoted above opposite to Prov. xvi. 9:

- Prov. xix. 21. *There are many devices in a man's heart;
But the counsel of Jahveh, that shall
stand.*

19. 14. *God is (ever) in his success,
15. Man is (ever) in his failure.*

Chapter xx of the Hebrew Book of Proverbs contains three verses which have more or less noteworthy parallels in *The Teaching of Amenophis*. The brevity of the last one as handed down in the Hebrew version tends to suggest the priority of the version preserved in *Amenophis*, while its strongly Jahvistic tone well illustrates the way in which the religious genius of the Hebrew people purified and dedicated all that they borrowed from other peoples to their own spiritual environment.

THE HEBREW BOOK OF PROVERBS

THE TEACHING OF AMENOPHIS

Prov. xx. 9^a. *Who can say, I have made my heart clean?*

19. *He that goeth about as a talebearer revealeth secrets:*

Therefore meddle not with him that openeth wide his lips.

[xx. 20, 21 without any parallel in *Amenophis*.]

22. *Say not thou, I will recompense evil:*

Wait on Jahveh, and he shall save thee.

19. 18. *Say not "I have no crime."*

22. 13. *Spread not thy sayings about to others,*

14. *nor associate to thyself one who lays bare his heart.*

3. *Say not "Find me a redeemer,*

4. *for a man who hateth me hath injured me."*

5. *Verily thou knowest not the design of God,*

6. *thou canst not realise (1) the morrow.*

7. *Sit thee down at the hands of God;*

8. *thy tranquillity will overthrow them.*

The moral set forth in the verse which immediately follows this last quotation from the Hebrew Book of Proverbs has an interesting parallel in *The Teaching of Amenophis*, but in a different context, for it precedes the words already quoted above opposite Ch. xvi. 11 of the Hebrew Book of Proverbs.

Prov. xx. 23. *Divers weights are an abomination to Jahveh;*

And a false balance is not good.

(Cf. also Prov. xx. 10.)

17. 18. *Tamper not with the scales, nor falsify the kite-weights,*

19. *nor diminish the fractions of the corn-measure.*

The Third Section of the Hebrew Book of Proverbs consists of Chs. xxii. 17—xxiv. 22, and, as the "Massoretic" (i.e. the traditional Hebrew) Text reads, has the title "The words of the wise." It is in this section that the parallels with *The Teaching of Amenophis* are closest and at the same time most numerous. There is a remarkable similarity of ideals and ideas; they appear to be fresher and more vigorous in form and expression in *The Teaching of Amenophis* than in their abbreviated form in the Hebrew Book of Proverbs (cf., e.g., Prov. xxiii. 4, 5 below with the lines there quoted from *The Teaching of Amenophis*). Moreover verse after verse of these chapters of the Hebrew Book of Proverbs finds a counterpart in *Amenophis*. As will be seen from the chapter-references, the passages quoted from the latter often appear in the same context and mostly, though by no means invariably, stand in the same relative order in it as the corresponding Hebrew proverbs do in the Hebrew Book of Proverbs. The reader should carefully note the order by observing the chapter-references. Moreover the "thirty chapters" of *Amenophis* not only find a verbal parallel in the (emended) text of Proverbs (see Prov. xxii. 20 below and footnote), but Gressmann finds a literal "thirty" proverbs in this part of the Hebrew Book of Proverbs. The inference that almost the whole of this section (Chs. xxii. 17—xxiv. 22) of the Hebrew Book of Proverbs is ultimately derived from *The Teaching of Amenophis* (or from a source from which this latter was also derived) would appear to be irresistible; the further inference that this particular section of the Hebrew Book of Proverbs was compiled, say, in the latter part of the Monarchy, is supported by the fact that xxiii. 13 ff. (lacking any corresponding proverb in *Amenophis*) has a close parallel in Aḥikar 81 ff., a work most probably of Mesopotamian origin, which, on account of its references to the Assyrian kings Sennacherib and Esarhaddon, could not have been compiled much earlier than the closing years of the Assyrian domination (see my Introduction to *TORIT* in Charles' *Apocrypha and Pseudepigrapha of the Old Testament*, vol. i). In several difficult

passages *The Teaching of Amenophis* gives considerable assistance in restoring the original text of the Hebrew Proverbs.

THE HEBREW BOOK OF PROVERBS

- Prov. xxii. 17. *Incline thine ear, and hear <my words>¹,
And apply thy heart to know
<them>².
18. *For it is pleasant if thou keep them
within thee.**

- If they be established <as a peg>³
upon thy lips;
19. *In order that thy trust may be in
Jahveh,
I have made <the path of life>⁴
known to thee this day.
20. *Have not I written unto thee <thirty
(sayings)>⁵;
They consist of counsels and know-
ledge.***

21. *That thou mayest make the truth
known <to him that speaketh>⁶,
That thou mayest carry back words
<>⁷ to him that sent thee.
22. *Rob not the poor, because he is poor,
Neither crush the afflicted in the
gate:**

[23 without parallel in *Amenophis*.]

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3. 9. *Give thine ears, hear (the words) that are said,
10. give thy mind to interpret them;
11. to put them in thy heart is good.*

[ll. 12-15 are without parallels in this chapter of the Hebrew Book of Proverbs.]

16. *They will be a mooring-post in (T) thy
tongue.
1. 7. To direct him to the path of life.
27. 7. See for thyself these thirty chapters,
8. they please, they educate,
etc. (cf. 1. 1-4).
1. 5. Knowledge how to answer a statement to its
pronouncer,
6. and return a report to one that has sent
him.
4. 4. Beware of robbing a poor wretch,
5. of being valorous against the man of broken
arm (i.e. helpless, afflicted).*

¹ דְּבָרַי Toy, Gress. (so one form of LXX doublet). M.T. דְּבָרַי חֲכָמִים, the second word a marginal title as in xxiv. 23 (Toy).

² לְדַעְתָּם (Erman) or לְדַעַת (Gress.) LXX ἐν γυῖν (with ἐν καὶ εἰς from next verso). M.T. לְדַעַתִּי.

³ כִּיתָר (Sellin), or יָתָר (Gress.). M.T. יָהָר.

⁴ דֶּרֶךְ חַיִּים (cf. Sellin), or read אֶרְחֹתָךְ (cf. LXX τῆς ὁδοῦ σου) or אֶרְחֹתֶיךָ (Gress. cf. iii. 6). Grimme proposes אֶרְחֹתִי (= אֶרְחֹתֶיךָ), the suffix referring to the "Jahveh" in the preceding line. M.T. אַף אַתָּה.

⁵ שְׁלִישִׁים (Erman, Grimme, Gress.). M.T. ק'חִלִּים (cf. R.V. m. "heretofore") Q'rt שְׁלִישִׁים (= officers, noble, excellent sayings?). The preposition in the following line may be an instance of "Beth Essentiae," but Grimme proposes בְּמַעֲצוֹת.

⁶ אֶמָּר (Gress.). M.T. אֶמְרִי אִמָּת. It is probable that קֶשֶׁת is a late scribe's Aramaic gloss on the Hebrew word אִמָּת (Toy) which it displaced (better than Gress.'s improbable suggestion that אִמָּת was a marginal gloss on the Aramaising קֶשֶׁת).

⁷ M.T. inserts אִמָּת, probably a result of its displacement in previous line (but according to Gress. it is a further result of the marginal glossing of קֶשֶׁת).

THE HEBREW BOOK OF PROVERBS

Prov. xxii. 24. *Do not associate to thyself a man
given to anger;
Nor go in company with a wrath-
ful man¹:*

25. *Lest thou learn his ways,
And get a snare to thy soul.*

[26, 27 without parallel in Amenophis.]

28. *Remove not the ancient landmark,
Which thy fathers have set.*

29. *Thou hast seen² a man skilful in his
business;
Before kings shall he stand:
He shall not stand before obscure
men³.*

Prov. xxiii. 1. *When thou sittest to eat with a ruler,
Consider diligently what⁴ is before
thee:*

2. *And put a knife⁵ to thy throat,
If thou be a man of great appetite.*

3. *Desire not his dainties,
Seeing they are deceitful bread.*

4. *Toil not to become rich;*

Cease <to prepare violence>⁶

5*. *Doth not <thy labour>⁷ make itself
wings—and it is not?*

THE TEACHING OF AMENOPHIS

11. 13. *Do not associate to thyself the passionate man,*

14. *nor approach him for conversation.*

13. 8. *Leap not to cleave to that (fellow),
9. lest a terror carry thee away.*

[Cf. 7, 12, 13 cited opposite Prov. xxiii. 10
below.]

27. 16. *As to a scribe who is experienced in his office,*

17. *he will find himself worthy (?) to be a
courtier.*

23. 13. *Eat not bread in presence of a noble,*

14. *nor apply thy mouth at the beginning.*

15. *If thou art satisfied (with) false munchings,*

16. *they are a diversion in thy saliva.*

17. *Look at the cup that is before thee,*

18. *and let it do thy need.*

9. 14. *Labour not to seek increase,*

15. *(then!) thy needs shall be secure for thee;*

16. *if riches be brought to thee by robbery,*

17. *they shall not stay the night with thee;*

18. *day dawns and they are not in thy house,*

19. *their places shall be seen, but they are not
(there);*

20. *(perchance) the earth hath opened its mouth,
"It adjusts it and swallows it,"*

¹ Lit. "man of wraths, passions," אִישׁ חַמּוֹת, a strange and otherwise unknown combination of אִישׁ with חַמּוֹת in the plural, apparently chosen for the express purpose of best representing the "passionate man" of the Egyptian original.

² So Erman. R.V. "Hast thou." Grimme and Gress. omit הוֹיֵת, the former holding that it is a corruption of הִנֵּן which, he thinks, stood at the end of the previous verse.

³ Gress. omits this last clause as an insertion made in the republican period after the Exile—but there seems to be no reason for its omission beyond the fact that it has no immediate parallel in *The Teaching of Amenophis* if the preceding line is allowed to stand: this latter, if of pre-exilic origin, probably read originally "the king" not "kings."

⁴ So LXX and other ancient VSS (others render "him who"). Hence the true resemblance is not with l. 14 but with l. 17 of the Egyptian.

⁵ Gress. (in order to create a resemblance to the Egyptian?) emends (with no support from VSS) שֶׁשֶׁן for שֶׁבִּין.

⁶ M.T. מְבִינֵתָּךְ חָדָל evidently corrupt, and the metre shows that a word has dropped out. Read הִכֵּן תוֹךְ חָדָל. This half-verse of the Hebrew may be intended as a general summary of ll. 15, 16, 17. Gress. מְבִינֵתָּךְ, Sellin מְבִינֵתָּךְ, Grimme מְבִינֵתָּךְ, but none of these emendations leaves room

for the restoration of the missing word demanded by the metre.

⁷ אֹנֵךְ. Gress. compares Ps. xxxvii. 10. M.T. עֵינֶיךָ, which is an impossible combination.

THE HEBREW BOOK OF PROVERBS

Prov. xxiii. 5^b. *Assuredly it < >¹ maketh wings for itself; like an eagle It flies² to heaven.*

6. *Eat thou not the bread of a niggard³,
Nor desire thou his dainties:*

7^a. *For as < >⁴, so is he:*

7^b. *"Eat and drink," saith he to thee;
And his heart is not with thee.*

8. *The morsel which thou hast eaten thou
must vomit up,
And must lose thy goodly things⁵.*

9. *Speak not in the hearing of a fool;
For he will despise thy wise dis-
course.*

10. *Remove not the ancient landmark⁶;*

*And enter not into the fields of the
fatherless;*

11. *For their redeemer is mighty;
He will plead their cause against
thee.*

In Ch. xxiv. 11 we find the last parallel, in this section of Proverbs, to *The Teaching*:

*Deliver them that are carried away
unto death,*

*And those that are tottering to the
slaughter forbear thou not to deliver.*

The next section of the Hebrew Book of Proverbs (xxiv. 23—34) is very short, being only an appendix ("These also are sayings of the wise," xxiv. 23) to the immediately pre-

¹ עשה an incorrect anticipation of יעשה and spoils the metre. Toy emends to עָשָׂה and puts it into the first half of the verse.

² Qrd יעוף (K'thibb יעוף).

³ Lit. "one who hath an evil eye."

⁴ M.T. שֶׁר untranslatable (unless in Aram. sense=estimate, reckon, Arab.=know). It is, therefore, impossible to determine whether or not the line corresponds in any way to the Egyptian. Grimme and (independently) Gress. conjecture שֶׁר and Gress. adds a clause וְכַמוֹ מֵר בְּצוּאָר (for which there is no support in the Versions) to create a line corresponding to L 8 of the Egyptian.

⁵ By his omission of דְּבָרִים (as meaning necessarily "words") Gress. makes the line metrically deficient. נְעִים is nowhere used of "words."

⁶ A doublet of xiii. 28 (q.v.).

THE TEACHING OF AMENOPHIS

10. 1. *and has sunk them in Tēi,*
2. *(or) they have made for themselves a great
breach of their measure,*
3. *and they have sunk themselves in the corn-
store,*
4. *(or) they have made themselves wings like geese,*
5. *they have flown to heaven.*
14. 5. *Covet not the property of a dependent,*
6. *nor hunger for his bread.*
7. *Verily the property of a dependent, it is a
choking (T) for the throat,*
8. *it is a vomiting (T) for the gullet.*
9. *When he has obtained it by false oaths*
10. *his desire is perverted (T) by his belly.*

[ll. 11—16 without parallel in the Hebrew Book of Proverbs at this point.]

17. *The (too) great mouthful of bread, thou
swallowest it and vomitest it,*
18. *thou art emptied of thy good.*
22. 11. *Empty not thine inmost soul to everybody,*
12. *nor spoil (thereby) thine influence.*
7. 12. *Remove not the landmark on the boundaries
of the sown,*
13. *nor shift the position of the measuring-cord;*
14. *covet not a cubit of land,*
15. *nor throw down the boundaries of the widow.*
8. 9. *Beware of throwing down the boundaries of
the sown,*
10. *lest a terror carry thee away.*

11. 6. *Cry not "crime" at a man;*

7. *hide the manner of (a fugitive's) flight.*

ceeding section. But it contains one interesting parallel to *The Teaching of Amenophis* which it would appear anticipated the Hebrew sage in modifying the ancient *lex talionis* and in thus preparing the way for the "Golden Rule" of later Judaism and of Christianity:

THE HEBREW BOOK OF PROVERBS

THE TEACHING OF AMENOPHIS

Prov. xxiv. 29. *Say not: I will do to him as he did to me.* 5. 2. *For we will not do as he (hath done).*

[For the context see the next extract.]

The next section consists of Chs. xxv. 1—xxix. 27, which, though not containing so bright a picture of the Monarchy as the immediately preceding one, is usually regarded as by no means one of the latest sections of the Book. The parallelism in the following passage is not close, but the Hebrew and Egyptian sages both put forward the same interesting and highly humanitarian ideal which forms the foundation for one of the most remarkable of the ethical *dicta* in the New Testament.

Prov. xxv. 21. *If he that hateth thee be hungry, give him < >¹ to eat; And if he be thirsty, give him < >¹ to drink.* 5. 1. *Steer that we may carry the bad man over,* 2. *for we will not do as he (hath done).*

3. *Lift him up, give him thy hand,*
4. *commit him to the arms of God;*
5. *fill his belly with bread of thine,*
6. *that he may be satisfied and understand (?)*

In Ch. xxvii. two separate verses are deserving of comparison with *The Teaching of Amenophis*. In the first place:

Prov. xxvii. 1. *Boast not thyself of to-morrow: For thou knowest not what a day may bring forth.* 22. 5. *Verily thou knowest not the design of God,* 6. *thou canst not realize (?) the morrow.*

And thirteen verses later compare the Hebrew proverb with a (quite different) section of *The Teaching of Amenophis*:

Prov. xxvii. 14. *He that blasphemeth < an evil man >² with a loud voice < >³, It shall be counted a curse to him.* 13. 11. *Do not salute thy passionate (opponent), forcing thyself,* 12. *nor grieve thine own heart (thereby);* 13. *say not to him "Hail to thee" in falsehood,* 14. *when there is terror in thy belly.*

The remaining sections of the Hebrew Book of Proverbs contain no resemblance to *The Teaching of Amenophis* and consequently fall outside the limits of this note. They are discussed by Gressmann and ably used by him in support of his thesis of an international culture and an international proverbial literature.

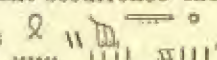
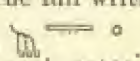
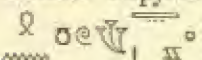
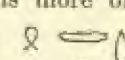
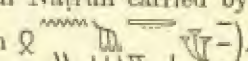
¹ M.T. inserts להם in the first, and מים in the second line, but they are absent from LXX and from Romans xii. 20.


² M.T. רעו רע ("evil, wicked, person") is more suitable here than רע; רע, however, never appears with the suffix. Consequently either רע without suffix was the original reading, and, when wrongly interpreted as רע, received the suffix, or the unusual suffix "his evil man" was due to the Hebrew compiler's immediate dependence upon Amenophis's "thy passionate" in which, Professor Griffith informs me, the suffix is as extraordinary as would be the suffix with רע in Hebrew.

³ Toy in 1899 had proposed the omission of M.T. בבקר השכים, a proposal which, granted the derivation of this verse from *The Teaching of Amenophis*, is now fully supported by the text of the latter. בקול גדול corresponding to "forcing thyself." Gress's proposal to omit בבקר and retain only השכים is clearly not so good.

THE PLANT CALLED "HAIRS OF THE EARTH"

By WARREN R. DAWSON

In the Egyptian medical papyri there is a vegetable drug of frequent occurrence the name of which means, literally, "hairs of the earth." The full writing is  but in the Ebers Papyrus it is usually abbreviated to . In the corrupt Berlin Medical Papyrus the word is written in various ways: in 13. 10 it takes the form , but elsewhere the first group is more often followed by a corrupt ligature which is manifestly influenced by the word  (e.g. 12. 4). "Hairs of the Earth" is one of the marketable products of the Wâdi Naṭrûn carried by the Eloquent Peasant on his ill-fated journey (*Peasant*, R 33, written ).

In medicine the seeds of the plant only are used, as the determinative  shows. From the fact that in almost every prescription in which the drug is employed for internal use it is accompanied by honey, sweet ale or wine as a vehicle, we may safely infer that these seeds were bitter or otherwise unpalatable. The principal uses of the plant are as a laxative, purgative, diuretic, carminative, and for various disorders of the stomach, abdomen and rectum. We have accordingly to find a plant which fits in with the foregoing data, and of which the appearance lends justification to its ancient name, "hairs of the earth."

The properties of the drug suggest that the plant in question is the Fenugreek (*Trigonella foenum-graecum*, L.). In Egypt the small seedlings are used as a vegetable, and the germinating seedlings might well suggest the name "hairs of the earth." It is cultivated in Morocco, but on a far larger scale in Egypt, and its seeds have a bitter taste¹. In India it has also been cultivated from very early times, and "has a history of great antiquity: it was much valued by the ancients both as food and medicine...its seeds being considered carminative, tonic and aphrodisiac. Under the Arabic name of 'hulbah' and the Persian name 'shamlit' Mahometan writers describe the plant as hot and dry, aperient, diuretic, emmenagogue, useful in dropsy, chronic cough, and enlargements of the spleen and liver²."

Pliny³ gives several synonyms, amongst which are the Greek names *Βουκέρας* (under which Theophrastus mentions it⁴), and *τῆλος*, the name used by Dioscorides and others⁵. Pliny mentions the plant as medicinally useful as a desiccant, emollient and laxative. He states further that it is used internally for the stomach and intestines, for certain female disorders, for difficult labour, for the liver and for the spleen. Externally it is used as a plaster for abdominal pains, for various skin diseases, for application to the genitalia and for scurf or dandruff. In another place⁶, Pliny speaks of the "flour" (*farina*) prepared from

¹ FLUCKIGER and HANBURY, *Pharmacographia*, 173.

² DYMCKE, WARREN, and HOOPER, *Pharmacographia Indica*, 1, 401.

³ *Natural History*, XXIV, 120.

⁴ *Hist. Plant.*, IV, 4, 10.

⁵ *De Materia Medica*, II, 124, cf. ORIBASIUS, *De Simplicibus*, II, 87.

⁶ *Nat. Hist.*, XXII, 58.

TWO NOTES ON LAND-MEASUREMENT IN EGYPT

By SIR HENRY LYONS

With Plate xliii

1. The origin of Greek geometry.

Among the branches of knowledge for which the Greeks acknowledged their indebtedness to the Egyptians, geometry is especially mentioned both by Herodotus and by Strabo. The former (II, 109) says "This king (Sesostris) divided up the land among the Egyptians, giving an equal square plot to each man; from this he derived his revenue, imposing a rent to be paid each year. But if the river carried away a portion of any man's lot, he would come to him and report what had happened. And the king would send men to examine and to measure by how much the land had been diminished, in order that he might pay only a proportionate amount of rent. And it appears to me that geometry was discovered in this way, and that it afterwards came over into Greece."

Strabo (XVII, 3), on the other hand, attributes the development of geometry to the annual re-measurement of holdings which had to be made when the water had receded from the flooded land.

"An exact and minute division of the country was required by the frequent confusion of boundaries occasioned at the time of the rise of the Nile, which takes away, adds, and alters the various shapes of the bounds, and obliterates other marks by which the property of one person is distinguished from that of another. It was consequently necessary to measure the land repeatedly. Hence it is said geometry originated here."

It has been assumed that these are two slightly discrepant accounts of the same operation, namely the re-determination of property boundaries which had been effaced by the annual flood of the Nile.

But in reality each author is describing a different kind of re-measurement, and both kinds are still in operation.

When the whole of the alluvial plain of the Nile Valley was flooded annually, as was the case up to about a century ago when summer cultivation and perennial irrigation were first introduced in the delta, the flood water was retained on the land by dykes for about six weeks until the soil was thoroughly soaked and all the silt in suspension had been deposited; it was then run off into the falling river. As soon as these basin lands began to dry, lines were ranged out across them from dyke to dyke by means of signals, or by fires lit on the dykes, and, from the records which were preserved in each village, the width of each holding was measured out and marked. This is what Strabo refers to, and this procedure was regularly employed twenty years ago in upper Egypt, and is so still where basin irrigation is still practised, in the provinces of Girgah and Kenah.

But the re-measurement to which Herodotus refers is of another kind. The sloping face of the Nile bank down to the water's edge at the lowest stage of the river is cultivated in spring and summer as the river falls, and all this slope from flood level to the low stage level is recorded in the land registers as the *hōd el-gezīrah* or the "island division" of the

village lands, and many of the villagers own portions of it. In any year the river in flood may diminish the area of this *hód* by erosion or add to it by deposition, so that each year in the summer, when the river is low, these *gezîrah*-lands are re-measured and, according to the total area so found, a share is assigned to each landowner who owns land in the *hód el-gezîrah*. This share will vary as the *hód el-gezîrah* is increased or diminished in size, and the land-tax on it is adjusted accordingly for each year. Thus it will be seen that Herodotus and Strabo have described correctly two types of land-measurement which were made and are still made annually, the one for revenue purposes, and the other to enable landowners to recover their boundaries. Of the two the riverain land would require computation of areas more frequently than the re-establishment of the boundaries in basin land, and would be the more effective as a training in geometrical usage.

The Greeks have freely admitted that they derived much assistance from the Egyptians in many branches of science and in technical learning, and it is interesting to consider the form in which this aid was given. Professor T. E. Peet¹, who records that the Greeks looked up to the Egyptians as the originators of their mathematics and more particularly of geometry, also lays stress upon the intensely practical character of Egyptian mathematics² in which each problem was worked out on its merits, and a general rule or method applicable to a whole class of them was rarely discussed. For the Greeks it was not sufficient to know a fact, they must know the why and the wherefore, and did not rest until they were able to give a rational explanation of any phenomenon.

This difference between the Greek and the Egyptian type of mind seems to throw some light on the nature of the intellectual debt of Greece to Egypt. It suggests that what Thales, Pythagoras and others, who are recorded as having lived for several years in Egypt for the purpose of study, found there, was not so much a coordinated system of learning as an accumulated mass of observational material relating to mathematics, engineering, medicine and much else. With this to work upon the Greek mind, with its genius for generalisation and inductive reasoning, produced what has come down to us as Greek science. The Rhind Mathematical Papyrus and the Edwin Smith Surgical Papyrus are examples which have survived to show us what they may have used. In the same way too, no doubt, the learning of the Babylonians was utilised, as when Thales predicted a solar eclipse from their observations. In this way may lie the explanation of the marvellous achievements of the Greek philosophers, accomplished within the singularly short space of four centuries.

2. The Groma.

One of the most important instruments of the Roman land surveyor was the *groma*, the instrument with which he laid out city plans, roads, camps and fortified settlements, and also the holdings on cultivated land. It was used by a class of surveyors, the *gromatici*, who developed an elaborate technique for its use, of which accounts have been preserved to us in the writings of Hyginus of the first century A.D. and others³. The *groma* consisted essentially of two wooden rods fixed at right angles to one another to form a cross (*stella*) and from the end of each arm a plummet was suspended. When one pair of plumb lines had been aligned on a mark or along a boundary line, lines at right angles to this could be set off by means of the other pair of plumb lines.

¹ *The Rhind Mathematical Papyrus*, 31.

² *Op. cit.*, 10.

³ M. CASTOR, *Die römischen Agrimensoren*, Leipzig, 1875; OXÉ, *Bonner Jahrbuch*, Bd. 128, p. 22 ff.

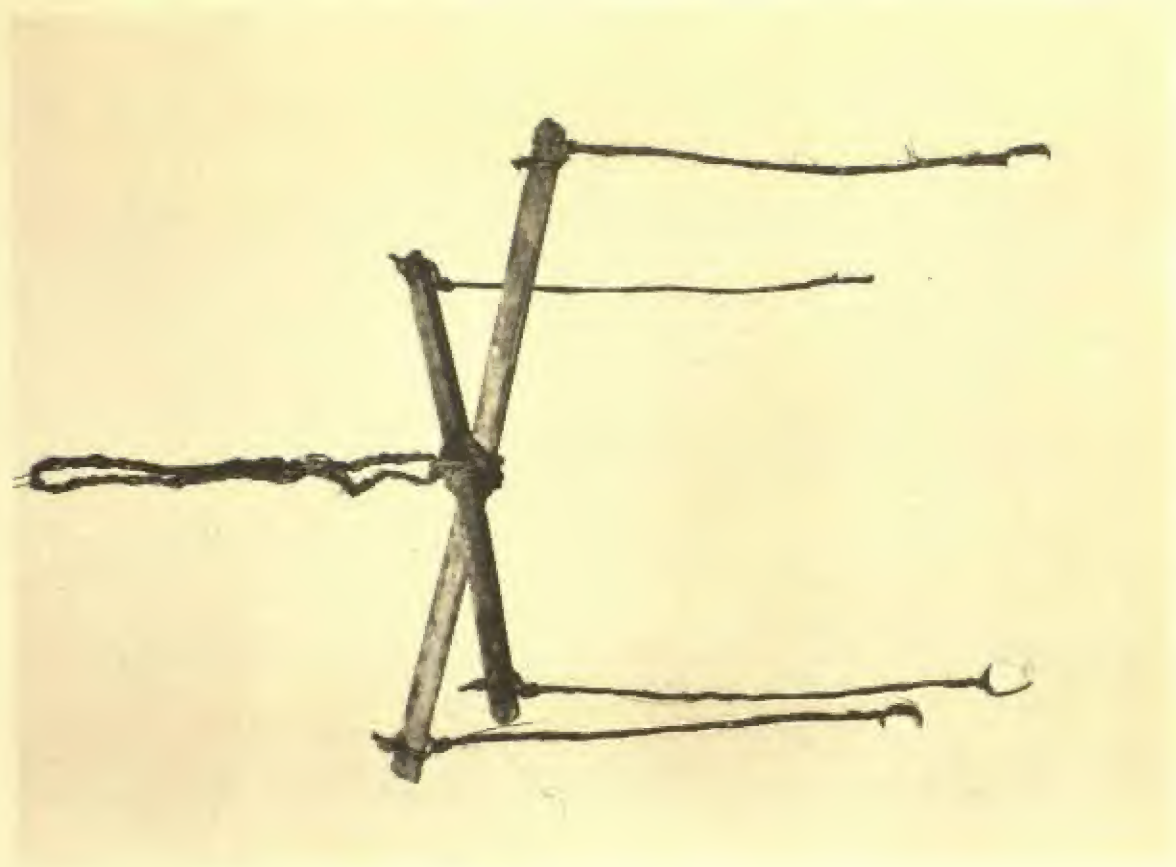
About twelve years ago Dr. Della Corte, the director of the excavations at Pompeii, found all the metal parts of a large *groma* in a house in the Via Abbondanza, and on them traces of the wooden portions could be clearly seen on the corroded metal¹. From this evidence he was able to reconstruct the original instrument, and a full-size replica of it is on view in the Science Museum at South Kensington (Pl. xliii, fig. 1).

It has been suggested that the *groma* was introduced into Italy from Greece through the Etruscans, and that the name is but the Etruscan form of the Greek *gnomon*.

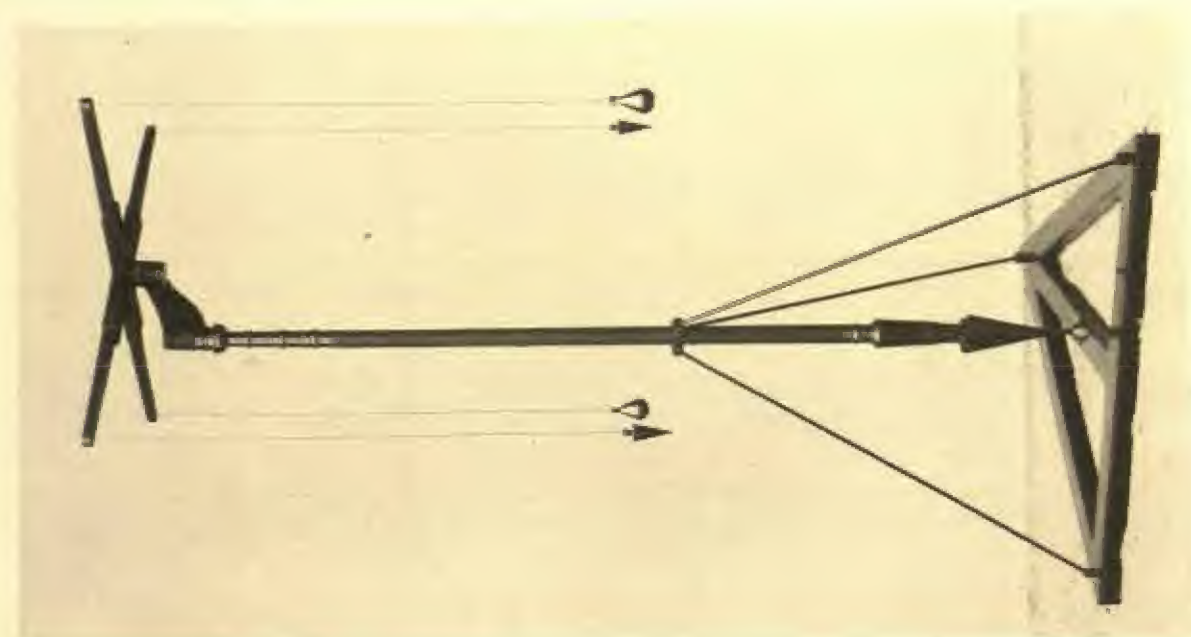
Recently a roughly-made instrument of this type, but to be held in the hand instead of being mounted on a stand, has come to light. It consists (Pl. xliii, fig. 2) of two pieces of palm-leaf rib 350 mm. and 370 mm. long respectively, which are tied together at right angles with a piece of palm fibre cord. The upper rod has a part of the rounded "keel" of the palm rib cut away to form a stop against which the lower rod rests when it is in the correct position. The plumb line and plummet were missing, but the upper part of each rod is deeply notched near its ends for the attachment of the plumb lines. The instrument was evidently made by some landowner or cultivator for his own needs. The precise locality in which it was found is not known, but it was with a quantity of material of trifling value which had been brought back by one of the expeditions which went to the Fayyûm to collect papyri of the Graeco-Roman age. Thus, although no mention of the *groma* has been found in any of the Fayyûm papyri, it is now certain that the instrument was in use in Egypt in those times.

In the *merkhet* we have an Egyptian instrument of a somewhat similar type; a plummet and plumb line attached to a horizontal rod and used for setting out a line or observing objects with reference to a selected alignment. The development of the *groma* from the *merkhet*, by hanging a plummet from each end of the rod, and then setting two such rods at right angles, would seem to be a natural improvement, though it may have needed the initiative of the Greek mind to introduce it, but direct evidence of this is wanting.

¹ M. DELLA CORTE, *Mon. Antichi R. Acc. dei Lincei*, xxviii.



2. *Groma* from the Fayyum.



1. Reconstruction of a *Groma* from Pompeii.

Scale $\frac{1}{16}$.
Science Museum, South Kensington.

RECORDS OF ENTRY AMONG THE EPHEBI

By H. I. BELL

The document numbered 146 in Wilcken's *Chrestomathie* (B.G.U. 1084) is of a peculiar and indeed, at the time of its appearance, unique form. Recently an exact parallel has appeared in vol. VII of the series of the Società Italiana (P.S.I. 777). The arrangement of the two documents is as follows:—First comes a statement of the date at which a person unnamed was entered among the ephebi. This is followed by a précis of the return of birth of a named person, obviously the boy whose entry among the ephebi has already been noted. In *Chrest.* 146 (the end of P.S.I. 777 is lost) this is again followed by a subscription of some official, certifying that the document has been duly deposited by a named person, different from the subject of the preceding sections, in his bureau. From the docket on the verso of *Chrest.* 146, which reads ἐφηβεία παρὸς Θέωνος¹, it appears that the depositor (apparently named Hieronymius) was the son of the person whose birth and ephebate were thus certified.

The exact parallelism of form between the two documents suggests that they are not to be regarded as isolated and more or less accidental cases of the certification of entry among the ephebi (Wilcken: "zur Erreichung irgend eines praktischen Zweckes"), but that such certificates were frequently required and that, consequently, a stereotyped formula was evolved for them. Since, as we now know from P. Lond. 1912, 53, entry among the ephebi was the condition of citizenship, at least at Alexandria, it was natural enough that certificates of entry should be necessary for many purposes, just as, with us, a birth certificate is often requisite. This hypothesis is strengthened by the appearance of yet another document of the kind, once again showing a practically identical arrangement. The document in question was acquired last year as part of a joint purchase, and in the distribution of the single papyri was assigned to the University of Michigan. As it has not yet, at the time of writing, been despatched to Ann Arbor I am unable to quote an inventory number, but in my provisional report on the whole collection it was numbered Lot III, no. 132. For permission to publish it here I am indebted to the kindness of Prof. Kelsey and the authorities of the University.

Publication seems advisable not only because the new papyrus furnishes a further example of the type but also in virtue of several incidental points of interest, dealt with in the notes. It will be noticed that the document, like *Chrest.* 146 and P.S.I. 777, refers to a citizen of Alexandria; this is proved by the tribe and deme names. The coincidence can hardly be accidental; we are justified in concluding that the type was specifically Alexandrian. There is one important difference between the new papyrus and *Chrest.* 146, in that it lacks the certificate of deposition. The symbol at the foot may have some connexion with registration, but certainly the formula seen in *Chrest.* 146 is lacking. There is however a docket on the verso similar to that of the Berlin papyrus; P.S.I. 777 has at present no

¹ Wilcken: "vor παρὸς vielleicht Ἐφηβεία." This is confirmed by the document published below.

such docket, but it may have disappeared owing to the mutilation of the lower part. Several obvious blunders in the new papyrus show that it was written very negligently.

- [χρόν]ος ἐφηβίας ἔτους τετάρ-
 [του] Αὐτοκράτορος Καίσαρος
 [Τί]του Αἰλίου Ἀδριανοῦ
 [Ἀν]τωνίου Σεβαστοῦ Εὐσεβ(οῦς)
 5 [μη]νὸς Σεβαστοῦ Εὐσεβί[ου]
 [τρι]τη καὶ εἰκάδι.
 [Διο]γένης Γαίου Σωσικόσ-
 [μι]ος ὁ καὶ Ἀλθαιεύς
 [ἐτῶν] τριάκοντα ἑπτὰ
 10 [κ]αὶ ἡ τοῦ(του) γυνὴ Κλημα-
 [τι]α Φ[ι]λίππου ἀστὴ ἐτῶν
 [τε]σσαράκοντα δύο
 [με]τὰ κυρίου ἀδελφοῦ
 [Σα]ραπί[ω]νος Σωσικόσ-
 15 [μι]ος μεισητος καὶ Ἀλθαι-
 [έ]ως ἐτῶν τριάκοντα
 [δύο] ἀγνῆς Ἀρσινόης Ἐλευ-
 [σιν]ίας φάμενοι συνεῖναι
 [έα]υτοῖς[ς] ἀγρόφως, υἱὸν
 20 [Ἰού]λιον εριαπου ἐνός,
 [ἔτους] ἐνδεκάτου Αὐτοκρά-
 [τορος] Καίσαρος Τρ[α]ιανοῦ
 [Ἀδριανοῦ Σεβαστοῦ]
 [Ἰ]νέον Σεβαστοῦ τρίτη Ἀ-
 25 [δριαν]οῦ ἐκ πλαγίου Πτολε-
 [μαίου]ν τοῦ Πτολεμαίου τοῦ
 [καὶ Ἀ]ρποκρατίωνος.

ζ/

Verso.

Ἐφηβεία πατρὸς(ς) [Ἰ]ουλίου.

1-2. A.D. 140-141.

5. Εὐσεβί[ου]: there is no trace of the *ν*, and the edge of the papyrus is in most places intact, but it is possible that the letter was written very small and has disappeared. Εὐσεβίς could be read, the scribe having perhaps misread the abbreviation *εὐσεβι*^o; that the name was not likely to be very familiar to him may be inferred from the rarity of its occurrence. For the month Σεβαστός Εὐσεβείος, obviously so named in honour of Antoninus Pius, cf. B.G.U. 741, 51. HOHMANN (*Chronologie*, 70) equates it with Epeiph (June 25-July 24), in which month Antoninus succeeded to the principate.

10 f. Κλημα[τί]α: the *μ* is very doubtful. PREISIGKE, *Namenbuch*, does not cite this name, but gives several instances of the masculine, Κλημάτιος.

15. This line is the greatest puzzle of the document. Σωσικόςμιος is obviously a careless miswriting (extension of an abbreviation in the register?) for the genitive, but we should expect τοῦ καὶ Ἀλθαιέως and what is μεισητος? The readings are certain, and it

is conceivable if unlikely that a tribe might receive the name of Σωσικόσμιος with an additional epithet to distinguish it from the known Sosicosmian tribe, but μισητός is the last epithet one would expect in that case. One must conclude there is a corruption but it is difficult to see how it can have arisen. Is it to be taken as Μεισήτος, the patronymic of Sarapion, misplaced by the careless scribe? Sarapion may have been Clematia's half-brother. The name Μεισής however does not occur in PREISIGKE's *Namenbuch*.

17 f. Ἐλευ[σιν]ίας (which implies an identification of Arsinoë with Demeter) can probably be regarded as certain, for though Ἐλευ[θερ]ίας would suit the space equally well and a cult of Zeus Eleutherios is well known, the epithet does not appear to have been shared by Hera, nor can I find that it was applied to any other of the major goddesses. An identification with the personified Ἐλευθερία (cf. Ἀρσινόης Νείκης, *Chrest.* 146, 22) is improbable in the third century B.C., the period from which this street nomenclature dates. For such names see *Archiv*, VII, 22-24; the present instance, from a certainly Alexandrian document, goes to confirm the suggestion there made, that P. Lond. Inv. No. 2243 was written at Alexandria. The following are the street names of the type so far known:—ἀγυιὰ Ἀρσινόης Βασιλείας (equation of Arsinoë with Hera Basileia), ἀγυιὰ Ἀρσινόης Ἐλεήμονος (Aphrodite Eleïmon), ἀγυιὰ Ἀρσινόης Τελείας (Hera Teleia), ἀγυιὰ Ἀρσινόης Χαλκιοίκου (Athena Chalkioikos), all from Lond. Inv. 2243; ἀγυιὰ Ἀρσινόης Καρποφόρου (Demeter Karpophoros), P. Tebt. III, 883 in P. Oxy. XIV, p. 7; ἀγυιὰ Ἀρσινόης Νείκης, *Chrest.* 146 and perhaps P.S.I. 777.

19. [ἐα]υτοῖς[ς]: or perhaps]υταιος (*sic*).

20. Read ἐμιαυτοῦ; υτ, in the cursive hand of the time, can sometimes look very like π, but it is extraordinary that the scribe should make such a blunder in a familiar word. At this point P.S.I. 777, though mutilation makes the reading uncertain, has an obviously different formula.

21. A.D. 126-127.

22. The reading must be that intended, but the traces, particularly that read as τ, are not easy to reconcile with it.

24. μηρός is not used in this context in either of the parallel documents; hence the space seems to make Νέου necessary. Neos Sebastos = Hathyr (Oct. 28—Nov. 26).

26. The scribe perhaps wrote προλε (*sic*). The explanation of this clause is a matter of dispute. *Chrest.* 146 has ἐκ πλαγίου Πτολεμαίου τοῦ Ἀντιπάτρου; the passage is mutilated in P.S.I. 777, but a name ending in δήμου seems to have occurred in this connexion.

28. ζ/: the reference of this number is not certain. It is not even beyond doubt that the character is a zeta at all and not rather a mere symbol. It has perhaps some connexion with a subsequent registration or deposition of the document; the hand may well be different from that of the text.

29. In a larger hand than the text and of a somewhat different type, but not necessarily the work of a different scribe.

[Since this article was sent to Press, P. M. Meyer has published (*Z. Sav.-St.*, XLVI, 1926, 314), from a Berlin papyrus (P. Berl. 11053), a further specimen of this type of document. It is fragmentary and adds little to our knowledge, but it is worth noting that it too concerns a citizen of Alexandria, and that it resembles the above document, l. 15, in inserting a word between the tribe and deme names (Εὐθυνόδιος ἔφηβος ὁ καὶ Ἀλθαιεύς). This, however, does not explain μισητός.]

GRAVES OF OXEN IN THE EASTERN DESERT OF EGYPT

By G. W. MURRAY

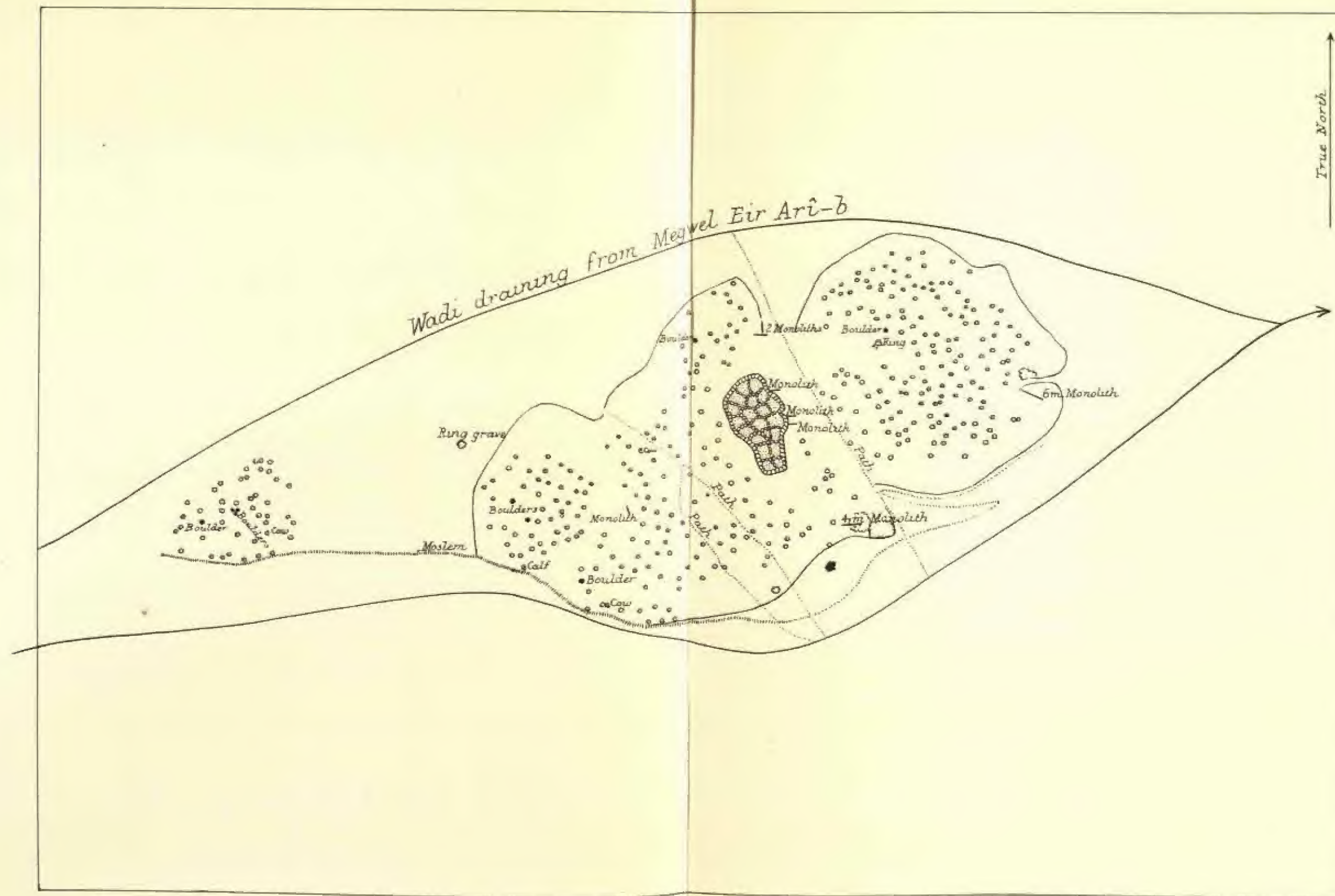
With Plates xlv and xxxiii, fig. 1

At the foot of the mountain of Êr Arib, by a little spring Megwel Êr Arib, 22° 34' N., 35° 16' E., in the Wâdi Shurafa el-Sharkî, leading to the Shurafa Pass over the Gebel Gerf range in the Bisharin country is a remarkable cemetery (Pl. xlv). It is enclosed by a low rubble wall, about 25 cm. high, with an entrance at the east, marked by a monolith, now fallen, 6.05 m. in length. In the centre is a platform, about 50 cm. high, formed of about a dozen irregular compartments with rubble walls, filled in with earth. I cleared out one of these compartments down to undisturbed earth without finding anything. Three more standing stones, now fallen, adorned the eastern face of this platform. (I set these up again to be photographed, see Pl. xxxiii, fig. 1.) The rest of the cemetery is filled with about 300 graves marked on the surface with little heaps of stones. About 41 more graves occur in a subsidiary cemetery outside the wall to the east. I opened three graves in the main cemetery and one in the subsidiary cemetery. All contained at a depth of not more than 50-60 cm. the bones of oxen. There were no potsherds on the site, and only one was found in the filling of one of the graves. It was of a brown incised ware, resembling C-group (Middle Nubian) pottery. The bones, fragile in condition, were found in a confused state in the graves, suggesting that the beasts had been cut up before burial, and at intervals among the graves were large smooth boulders upon which this had perhaps been done. One or two other standing stones were seen elsewhere in the cemetery. The interesting point is that at the present day cows hardly occur north of lat. 20°, and though perhaps they might exist with difficulty near Gebel Elba, lat. 22°, they could not nowadays be bred either in Gebel Gerf or in the Wâdi Abu Had, a Sudanese tributary of Wâdi 'Alakî, where my guide says a similar cemetery is found. The cemetery therefore seems to present definite evidence of a change of climate, which is corroborated to some extent elsewhere. Beadnell¹ considers there was a lake in Khargah Oasis down to Roman times, while Brooks² has compiled from historical evidence rainfall curves for Europe and Asia giving (after a minimum 1500 B.C.) a maximum in 850 B.C. returning to normal in A.D. 0.

The burials then, later than C-group, presumably go back to a time when the northern Bega had not yet come into possession of the canal. Camels have been supposed to have been introduced by the Persians about 500 B.C., and were certainly in use on the trade-routes of the Eastern Desert in Strabo's time. It was quite possibly the possession of the camel that led later to the invasions of Egypt by the Blemmyes, for in their donkey days the inhabitants of the Eastern Desert seem to have given little or no trouble to the ancient Egyptians.

¹ *An Egyptian Oasis*, 118.

² *Discovery*, December 1925, 473.



Graves of oxen near Êr Arîb

Scale 1 : 1000.

The C-group, that is to say the inhabitants of Lower Nubia in the time of the Middle Empire, undoubtedly possessed cows, for horns and heads are common in their cemeteries. They also set up standing stones: these were found both at Faras¹ and at Dakkah², and in the latter case rough outlines of a cow were scratched on two of the stelae. But in neither place were there definite cow burials, the portions of the animals found being always associated with human remains.

Cows, however, have been venerated down to quite recent times by the Bega. Plowden³ says of the Habab, a tribe in Northern Eritrea: "In each small village there is kept a cow of one breed, from generation to generation, on which the good fortune of the entire herd depends. This cow (or there may be two) is milked in peculiar vessels, and the milk must be drunk out of those vessels, as it would be sacrilege to pour it into any other; these are of earthenware, whilst the other cows are milked into wickerwork vases. Should this ceremony be omitted or varied, it is supposed that the cows of the tribe will become dry or die; and this, amongst a people who feed, it may be said, on milk, would be equivalent to a famine."

That the cow was personified in ancient times by the Bega is also extremely probable. Meinhof⁴, after drawing attention to the fact that the so-called masculine gender in Hamitic languages is really that of persons, while the feminine is that of things, has the following remarkable passage:

"In Bedanye, *ša'* denotes 'cow'.....yet this animal is grammatically masculine, since it is of such importance in the livelihood of the people that it is reckoned as a person. The same word is used grammatically as feminine when it means 'meat,' in other words, when it denotes not a person but a thing."

The standing stones, like those found by Crowfoot⁵ at Isa Derhêb, of course recall the Axum obelisks.

¹ *University of Liverpool, Annals of Archaeology and Anthropology*, VIII, 1921, 65-79, Plates ix, x.

² *Archaeological Survey of Nubia, Report*, 1909-10, 17, Plate 35 a, b.

³ W. C. PLOWDEN, *Travels in Abyssinia*, London, 1868, 14.

⁴ C. MEINHOF, *Sprachen der Hamiten*, 23.

⁵ J. W. CROWFOOT, *R.G.S. Journal*, 1911, XXXVII, 536, Plate 534.

NOTES ON TWO EGYPTIAN KINGS

By BATTISCOMBE GUNN

1. Concerning King Snefru.

Rarely indeed do Egyptian texts give us any insight into the personalities of the Pharaohs. Contemporary descriptions of kings are of course quite useless in this respect, being but formal eulogies descriptive rather of a superhuman ideal of royalty than of any individual occupant of the throne. The records (as well as more concrete evidence) of royal activities within Egypt usually leave much scope for conjecture as to how much was due to the king's own initiative and how much to that of his advisers, or to the mere routine of state; and similarly, the military reputation which some kings have gained may rest chiefly upon the qualities of their generals. A few of the royal allocutions to subjects or to posterity (Sesostris III's Semnah stela, the text on the base of Hatshepsut's standing obelisk at Karnak, Sethos I's longer Redesiya inscription) are engagingly fresh, the work of an original mind able to break through the tradition of stringing time-honoured phrases together; but how do we know that the putative authors uttered or even inspired the words there ascribed to them? Even Akhenaten's personality is not distinct; of the others, only in two or three cases is some trait left on record, such as Piankhy's hatred of cruelty to horses, and Wahankh Anōtef's fondness of dogs. That we learn so little, either from their own times or from their posterity, as to what manner of men the Pharaohs were, accounts partly for the absence of human interest which is a notable feature of Egyptian political history.

But on the character of Snefru, one of the greatest of the early monarchs, it is possible to say something of interest; for although we have no contemporary evidence thereon (his alleged incest with his daughter may or may not have been the outcome of an idiosyncrasy), we obtain, if we look for them, clear glimpses of the light in which he was regarded by later generations. These indications are given us, not by historical documents, but by popular narratives which profess to tell us of happenings in Snefru's time. The following are the relevant passages:

1. The Prisse Papyrus preserves the latter part of a book of wise sayings which the vizier of Snefru's predecessor is stated to have written down for his children's benefit—the sayings being set in a framework of narrative. At the end we are told that King Huni died; "then the Majesty of King Snefru was raised up¹ as *beneficent king* in the whole land." The word rendered "beneficent" is *mnḥ*, in Ptolemaic times the equivalent of *εὐεργέτης*.

2. The work known as the Prophecies of Neferreḥu begins: "Now it happened that the Majesty of the justified Snefru was *beneficent king* in the whole land." Here we have

¹ Quite incidentally, the term "raised up" (*ḥḥ*) seems to indicate that Snefru was the first of his dynasty.

the same epithet. In no other case known to me is it applied in this way to a deceased ruler: it can be no mere conventional honorific.

3. In the Westcar Papyrus it is recounted how one day Snefru, feeling rather jaded, refreshed mind and body by an outing on the palace lake. Suddenly one of the twenty pretty girls who were rowing him about dropped her jewel into the water. The Chief Magician is hastily summoned, and Snefru, addressing him as "*Zazamōnekh, my brother,*" tells him of the mishap, which is quickly set right by art magic.

4. The Prophecies of Neferreḥu relate that Snefru, again seeking distraction from the cares of kingship, had his courtiers summoned, "and his Majesty said to them: '*Comrades,* I have had you summoned that you may seek out for me...one who will tell me some good matter, choice discourse at hearing which my Majesty may be amused.'"

5. The courtiers thereupon sing the praises of one Neferreḥu; Snefru sends for him, and addresses the stranger thus: "Come now, Neferreḥu, *my friend,* tell me some good matter, choice discourse at hearing which my Majesty may be amused."

6. Neferreḥu then asks whether he shall speak of what is happening or of what shall happen. "And his Majesty said: 'Of what shall happen, of course; the present has entered into existence and is being passed by.' Then he put forth his hand to a box of writing requisites, and took out papyrus and pen-and-ink case, *and he wrote down what Neferreḥu said.*"

The first two passages quoted show that Snefru as a ruler was so highly esteemed in later times that he (and he alone) was normally referred to as the Beneficent King. I believe the words in italics in the other four passages to be intentional touches of literary characterization, the expression of a definite tradition as to Snefru's character. That a mighty Pharaoh should hail one of his officials as "my brother" (the *yâ ākhi* of modern Egypt), his courtiers as "comrades" and a stranger as "my friend" is strikingly unconventional; such words are put into no other king's mouth. Equally striking is the picture of a king so little bound by court etiquette that instead of calling in a secretary to take down memorable utterances he seizes pen and paper and does the work himself, an action that is again without parallel. The Pharaoh who is made to speak and act thus must have been remembered as eminently genial and "democratic" in his dealings with lower mortals. And, perhaps, as being fond of pleasure in intervals of public beneficence; for it is worthy of note that in both the tales in which he figures he is represented as seeking amusement.

A great king with such a reputation could not but endear himself to posterity; and that this is the case we have substantial evidence. Of the cults of the Old Kingdom rulers, Snefru's was alone popular; we can trace it through history, in more than one city, down to Ptolemaic times, when it still flourished. And the number of places called after him, for many centuries after his death, testifies further to the honour in which he was held.

How far the traditional estimate of Snefru's character was accurate is a question that we have no means of deciding; but it is difficult to believe that a conception in some ways so divergent from the Egyptian ideal of the god-king can have been quite baseless. Although popular tradition is not historical evidence, it is the next best thing.

¹ For the meaning of the word *ḥpw* used here, compare its use by labourers and artisans (*e.g.*, ERMAN, *Reden, Rufe und Lieder*, 15, 22, 23; SETHE, *Urk.* iv, 1154. 5, 11), as the exact equivalent of our "mates."

2. The Name Tut'ankhamūn.

It seems to be assumed without question by Egyptologists, and therefore by the public, that the name of the Egyptian king who in recent years has achieved world-wide celebrity means "Living Image of Amūn." This interpretation is, however, open to serious objection.

We must remember that "Tut'ankhamūn" is an alteration, in the interests of the Amūnist reaction, from the earlier name "Tut'ankhaten," a name reflecting the predominance of the exclusive Aten-worship instituted by Akhenaten. The change, like that in the name of Tut'ankhaten's wife, was confined to a single word, the name of the god Amūn being substituted for that of the god Aten. Thus if "Tut'ankhamūn" means "Living Image of Amūn," then "Tut'ankhaten" must mean "Living Image of Aten"; of this there can be no question. But to translate "Tut'ankhaten" in this way is to assume that its bearer had the hardihood, even before he became king (for this was his "personal" name), to call himself the "living image" of the one Egyptian god who was studiously and completely shorn of any anthropomorphic associations. Surely such a name would have been utterly repugnant to Atenist ideas, as being not only blasphemous but ridiculous. Although at other times the idea of the King as the living presentment of the solar god is common enough, in the Aten period such a name, especially if borne by a non-royal person, as Tut'ankhaten originally was, seems to be almost unthinkable.








There is also a grammatical difficulty. If the idea expressed were "Living Image of Aten," we should expect *Twt ḥꜥ nī Ḳt*, with the indirect genitive after the adjective (cf. ERMAN, *Grammatik*, 1911, 218 Anm.); compare *Ššꜥ ḥꜥ nī Ḳt*, "Living Image of Atūn," Nebti-name of Tuthmosis III; *Šꜥm nꜥꜣ nī Ḳꜥꜣꜣ*, "Divine Form of Khepri," "Golden-Horus" name of Sethos I; *Twt ḥꜥt nt Ḳmn*, "Glorious Symbol of Amūn," epithet of Hatshepsut (SETHE, *Urk.*, IV, 357. 12).








But another interpretation, which not only removes these difficulties, but conforms the name to a common type, lies near to hand. That the first element of the name, *twt*, is here the well-known word for "image" is an unnecessary assumption, and is even unlikely for a graphic reason mentioned below. There is another word *twt*, an adjective, which means something like "pleasing."¹ It is found written exactly as in the name of Tut'ankhaten, and indeed occurs in the latter's "Horus-name," which is *Twt-mšwt*, Tewet-maswet, "Pleasing of Birth," i.e., he the birth of whom is pleasing². Taking, then, *twt* in "Tut'ankhaten" as meaning "pleasing," and rendering the second element, *ḥꜥ*, as "life"³ instead of "living," we obtain the meaning "The Life of Aten is Pleasing," and the name falls into a well-known class—compare the royal names Mer'ankhrē, "The Life of Rē is Lovely"; Kha'ḥꜥnkrē, "The Life of Rē is Resplendent"; Ded'ankhrē, "The Life of Rē is Enduring."

¹ For examples see Gardiner in *Proc. Soc. Bibl. Arch.*, 1914, 23. The adjective seems to mean (a) "agreeable," (b) "like," from the verb *twt* "to agree, accord with, resemble," with which *twt(w)* "image," "resemblance," "likeness," must also of course be connected. *Twt(w)* "to assemble" is probably also related.

² Amosis I bore this as his "Nebti" name; and for *twt* in a Horus-name cf. also *Twt-ḥꜥw*, "Whose Accession is Pleasing" (Tuthmosis IV).

³ It is also quite possible that *ḥꜥ*, here and in the three other names cited just below, is the verb "to live" in *ḥꜥm.f* "Aten lives is pleasing," i.e., it is pleasing that Aten lives, etc.; but this is not the place to discuss the point, which does not materially affect my contention.

The interpretation of *twt* here as the adjective "pleasing" rather than as "image" is further supported by the writing of the name. The words *twt* "image" and *twt* "pleasing" are both normally written with the sign  after ; but in the name Tut'ankhaten or Tut'ankhamûn we regularly find  only, as though to indicate that the word for "image" is not meant, for *twt* "pleasing" can dispense with the sign  (an image) much more easily than can *twt* "image," where  is an essential word-sign. And in the King's Horus-name *Twt-mšwt*, where *twt* can only be the adjective, we also find the writing  .

¹ So also in the Horus-name of Tuthmosis IV, and cf. MARIETTE, *Karnak*, 34. 35. The word perhaps loses its  from graphic assimilation with  "thou," just as the latter, on the other hand, is frequently written   or    in the Eighteenth Dynasty. The two words "image" and "thou" were perhaps homophonous (*twāte* f *twāt* f) at that time.

THE SUPPOSED REVOLUTION OF THE HIGH-PRIEST AMENHOTPE UNDER RAMESSES IX

By T. ERIC PEET

Nearly thirty years ago Spiegelberg¹ published a passage in the British Museum Papyrus 10052 (13. 24) in which occurred a reference to "the war of the high-priest of Amūn." Quite recently² he has compared this passage with one in Papyrus Mayer A which beyond doubt relates to the same incident. In so doing, however, he rejects the translation of this passage which I gave in my publication of the text³ and adopts a rendering which makes the high-priest Amenhotpe the author rather than the victim of a revolution. Still more recently Sethe⁴ has defended my translation of the crucial phrase, to my mind with complete success. At the same time I now perceive that none of us has seen the full meaning of the passage, mainly owing to a stupid error on my part, and as a correct rendering throws a little fresh light on this episode in an otherwise dark period it seems worth while to try to arrive at one.

The clue to the passage lies in the correct realization of what the speaker is trying to prove (Pap. Mayer A, 6. 3 ff.). He is a workman called Howtenūfer, and he has been accused by the priest Nesamūn son of Pibok (Mayer A, 2. 13) of having been, along with two other men, "in this place in which the portable chest was." For the benefit of those who are not acquainted with the papyrus it may be added that it deals with damage done to a portable chest, probably belonging to the high-priest Ramessesnakht⁵, which had originally lain in a storehouse in the temple of Medīnet Habu.

In 6. 3 Howtenūfer makes his defence. The whole point of it seems to be that he was absent from Thebes at the time when the damage was done, and that, though he may have been seen afterwards in the storehouse in which the portable chest lay, he was there for the legitimate purpose of drawing firewood which was stored there. The whole passage may be translated as follows:

"The workman Howtenūfer son of Amenkhau was next brought. He was given the oath by the Sovereign not to speak falsehood, and his deposition was heard. He said, The foreigners⁶ came and seized upon the temple while I was in charge of some asses belonging to my father, and Peheti, a foreigner, seized me and took me to Ipip, when Amenhotpe, who was chief priest of Amūn, had been suppressed six months. It so chanced that I returned after nine whole months of the suppression of Amenhotpe, who was high priest of Amūn, when this portable chest had already been damaged and set on fire. Now when order was restored the Prince of the West of Thebes and the scribe of the treasury Psmennakht and the scribe of the army Kashuti said, Let us collect the wood so that the store-men may not burn it. So they brought in what was left and placed a seal over it,

¹ *Rec. Trav.*, XIX, 91.

² *The Mayer Papyri A and B*, 13.

³ *Journal*, XI, 44.

⁴ *Zeitschr. f. äg. Spr.*, LVIII, 47-8.

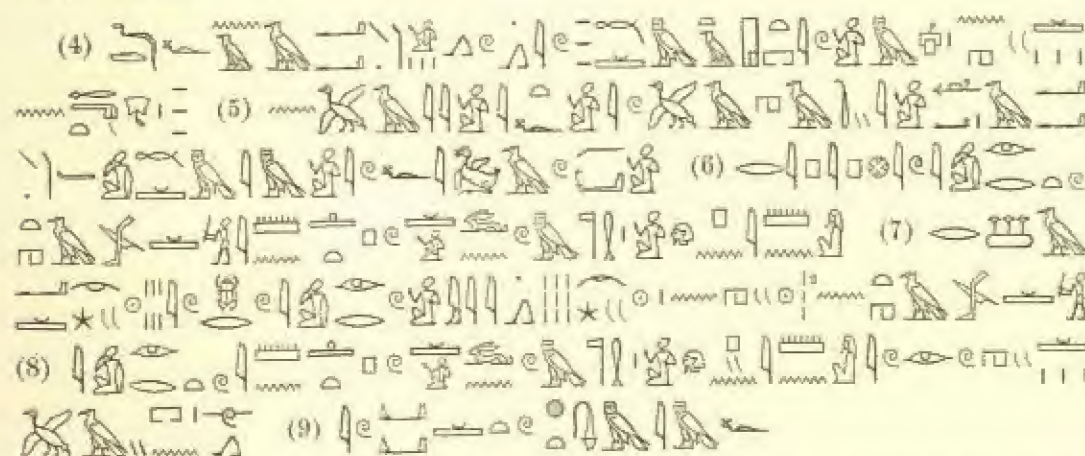
⁵ *Zeitschr. f. äg. Spr.*, LIX, 60-61.

⁶ *ſccw*, see GARDINER, *Proc. Soc. Bibl. Arch.*, 1915, 117 ff.

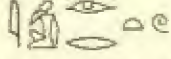
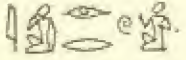

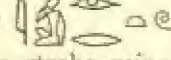




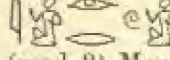
and it is intact this day. Now as for this place in which the remainder of this portable chest is the wood for the workmen's furnace is kept there, and it chanced that I had gone there to get wood. He said, Let him who accused me be brought. Nesamūn the son of Pibok was brought. They said to him, What have you to say about these three men whom you named? He replied, See them go to this place of.....! What do you mean? See them break this seal! I never saw them break this seal. I said it from fear.

"Howtenūfer was brought back. They said to him, You did go to this storehouse. He replied, What lay in the storehouse was some fire-wood belonging to the divine offerings, I having put it there to protect(?)¹ this seal."

It will be seen that this translation differs considerably from that given by Sethe in the very difficult sentence beginning "He said, The foreigners came and seized upon the temple," and some justification of my rendering is necessary. The original may be transcribed as follows:



The first point to be noted is that the second numeral in line 7 is not a 5 but a 9 (for the form *cf.* Mayer A, 4. 7), a fact which should never have escaped my observation in the first place. The effect of this change on the sense of the passage is obvious.

Next, the verbal form from the verb *irt* in the same line cannot be  as read by Sethe but only . A careful study of the scripts of the papyri of this group has convinced me that in the writing  standing for  the second of the two indefinite signs at the end is always quite clearly a stroke going downwards and to the left (in hieratic), while the first may be either the same or may bend back to the right to form a rough  as in line 8 (*cf.*  in line 14). Now in the form in line 7 the first stroke is a short but clear  and the second can be nothing but , as is clearly shown by comparison with the indubitable writings of  in lines 13 and 17. Moreover Sethe's rendering "als es geschah, dass man 5 (read 9) Monate von Tagen gekommen war mit dem sich vergehen gegen Amenhotpe"

¹ Meaning very uncertain. Perhaps "in order to enjoy the protection afforded by this seal."

² Or .

involves an idiomatic use of the verb *lht*, "to come," for which it would be very difficult to find parallels.

In line 6 it seems necessary to take *lw ltr-tw th*¹ as a subordinate clause in the Pluperfect Tense, this being the invariable force of *lw ltr-f sdm* in these papyri. Similarly with regard to *lw ltr-w hsw* in line 8 and *lw dldi-tw ht* in line 9; here, however, I am less confident, for Late Egyptian has several examples of *lw sdm-w-f* in principal clauses, though *lw sdm-tw-f* is regularly subordinate².

The context, however, seems decisive, for, if we refuse to admit that these two clauses are subordinate to the main verb *ltr-l lht* and anterior to it in time, Howtenüfer's defence breaks down and the elaborate detail of dates which he gives loses all its point. Note, too, how careful he is to say that he returned after³ nine *whole* months (this is the nuance conveyed by "nine months of days") of the suppression of Amenhotpe. We might justly have rendered "I *only* returned after nine months of the suppression....."

Whether the translation which is given above be correct in every detail or not, a historical fact of some value emerges. Whatever this suppression of the high-priest Amenhotpe may have been, it continued for at least nine months⁴. The event was of such importance that it served, not officially, but to workmen and such, as a means of measuring time. It was accompanied by strange events in Egypt, for it was possible for *scw*, which Gardiner has given good reasons for translating as "foreigners", to seize a temple, probably that of Medinet Habu, and carry off men who were pursuing their lawful business there.

Is it possible to fix the date of this event? In Mayer A, 2, 10 ff. we find that Nesamün, the accuser of Howtenüfer, had been brought for examination "on account of his father⁵." He is asked to tell the story of his father's going (to damage the portable chest) together with his confederates. He replies "My father was indeed there, when I was a little child; I have no knowledge of what he did." Thus he denies all knowledge of the *original* attack on the portable chest. Re-examined after a beating, he accuses Howtenüfer and two others of having been in "this place where the portable chest was." This Howtenüfer does not deny, though he does deny having taken part in the original crime, a charge which, indeed, Nesamün never makes: he admits having been in the place where the portable chest was, but only after the damage had been done, and for a perfectly legitimate purpose.

The original crime, which from Howtenüfer's evidence we may place between the sixth and the ninth months of the suppression, took place when the witness Nesamün was "a little child." At the time of his examination as a witness in Year 1 of the Renewal of Births, which in part at least coincided with the 19th year of Ramesses IX⁶ Neferkerôc,

¹ I have never supposed *th* here to be a noun as Sethe imagines. I used the word "violence" in translating because these forms cannot be neatly turned in English without employing a noun.

² The use of *lw sdm-w-f* in 8 as against *lw sdm-tw-f* in 9 is puzzling. Is it in some way due to the fact that *lht hsw* is virtually a compound verb?

³ We seem to need a preposition before the numeral 9, perhaps *m ht* or even *m* alone. It is curious that in "6 months" the numeral follows the noun while in "9 months" it precedes. Both are of course possible in an expression of time.

⁴ In *Journal*, XI, 45, note 2, I have questioned the correctness of Sethe's assumption that Amenhotpe "fell," and the conclusions he draws from it.

⁵ See above, p. 254, note 6.

⁶ In such cases the father is always dead.

⁷ See the dating of the dockets on the verso of Pap. Abbott. It has been assumed, not unreasonably, that Year 19 here refers to the same reign as the dates on the recto.

Nesamūn was a priest and no longer "a little child." It is not easy to say how much must be allowed for this interval, but it must be one of several years, hardly fewer than three or four. The later years of Neferkeré¹ were clearly a time of stress and confusion, for in Year 13 took place the great tomb-robberies dealt with in the Abbott and Amherst papyri as well as those recorded in Papyrus B.M. 10054¹, while in Year 17 occurred the robberies chronicled in Harris A (Pap. B.M. 10053 recto) and certain Turin documents². The attack on the portable chest is probably to be placed a little further back than Year 17, and possibly, but not necessarily, before Year 13.

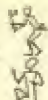

There are several other references in the papyri of this period to chaotic conditions which may perhaps be brought into connection with the "suppression of Amenhotpe." Spiegelberg has rightly seen that the same event is mentioned in Pap. B.M. 10052, 13. 24, where a witness named Mutemuia says of a certain man "Now when the war of the high-priest of Amūn (*pt hrwy n pt hm-ntr tpī n Ymn*) took place this man stole goods belonging to my father." Here Sethe has pointed out that the preposition *n* marks probably an objective and not a subjective genitive, "the war against the high-priest" rather than "the war made by the high-priest." The suppression of Amenhotpe was thus carried out with such violence as to merit the name of a "war."

Again in Pap. Mayer A, 13 n. 2, certain of the thieves are stated to have been killed "in the war in the Northern District." In the next line, line 3, we read of "thieves whom Pinehesi slew." This in itself may but indicate a case of ordinary murder, but nevertheless it recalls a passage in Pap. B.M. 10052 (10. 11 ff.) where a woman called Ēse, wife of Ker, is accused of having received stolen silver from her husband. On her denying it she is asked to explain "how you came to acquire those slaves which you acquired." Her explanation is not regarded as satisfactory, and one of her slaves is produced and asked how he passed into her employ. He states "When Pinehesi destroyed (*hf*) Hartai the young Nubian Butehamūn acquired me, and the Nubian Pentesecken bought me from him; he gave 2 deben of silver for me (note the price of a slave). Now when he was killed the gardener Ker bought me for a price." Now Hartai is the later Cynopolis, capital of the Jackal Nome, and had been recently destroyed by a man whose name was Pinehesi "The Nubian": we might even take the words, both here and in the Mayer A passage³, not as a proper name but quite literally as "this Nubian," meaning some famous Nubian with whom his hearers would all be acquainted. It is notable, too, that after the destruction of the city the slave passes successively into the hands of two Nubians, the second of whom meets with a violent end. Are we to see in this merely some local feud in Egypt, or did an invasion of Nubians penetrate as far north as the Jackal Nome? And does the killing of the second Nubian owner Pentesecken mark the recovery of the city by Egyptians? In any case, is this the war referred to in the passage quoted above as "the war in the Northern District"?

Whatever be the solution of these problems, Nubians were not the only foreigners of whose presence in Egypt about this time we have evidence. We have already seen that Howtenūfer was carried off by *šcw* who had seized the temple. The papyrus published by

¹ In my note on this papyrus in *Journal*, xi, 164, I ought to have mentioned that the thieves inculpatated on the verso are the same gang as in Amherst.

² *Journal*, xi, 47 ff.

³ Where read perhaps  for , as in 10052.

only month, season and day, and we must either assume that they too belong to Year 18, or that the passage from Regnal Year 17 to 18 took place between the penultimate dating (third summer month, day 19) and the last, the second hypothesis being perhaps the more probable. On a date in this papyrus which is lost, but which was earlier than the fourth winter month day $10 + x$, figures a mayor of Thebes and vizier Wennefer. Now Khaemwōse was still vizier on the 29th day of the first inundation month in Year 17 on the evidence of Pap. Turin P.R. 90, 2. 2, and thus between his disappearance and the reappearance of Nebmaarēnakht there intervened a vizier Wennefer. What is worse, Wennefer seems to reappear after Nebmaarēnakht in the reign of Ramesses XI Menmaarē¹. How are all these choppings and changings to be explained?²

The above rather disconnected notes will show that we have yet much to learn with regard to the history of the later Ramessides, and that there are distinct hopes of further discoveries from critical examination of the papyri of the period, more especially the tomb robbery group, of which I hope to give a complete edition within a very few months, and the unpublished documents at Turin³.

¹ *Rec. Trav.*, XIII, 173.

² Here is yet another puzzle. Names of the type Nebmaarēnakht, "Nebmaarē is victorious," are generally formed from the name of a reigning king. Thus this man was probably born during the reign of and named after Nebmaarē Ramesses VI. Now one of his colleagues in Mayer A and elsewhere was the overseer of the treasury of Pharaoh and overseer of the granary Menmaarēnakht. After whom was this man named? Hardly after Seti I, who had been dead a century and a half. The only Menmaarē known to us about this period is Ramesses XI who, in our present arrangement of the dynasty, falls too late. It might, however, be worth while to examine critically the evidence for putting him so late. As far as I can see it consists of nothing more than the story of the gradual encroachments of Hrihor on sculptures of his in the temple of Khonsu at Karnak. Is it possible that this story has been misread or at least misplaced?





³ I owe much of the content of this article to correspondence and conversation with Drs. Černý and Botti.

SOME OBSERVATIONS ON THE EGYPTIAN CALENDARS OF LUCKY AND UNLUCKY DAYS

By WARREN R. DAWSON

With Plate xlv

At the present day there are many persons who believe the 13th to be the unluckiest day of the month, and Friday the unluckiest of the week. In many places, moreover, the 29th of February in Leap Year is believed to be unpropitious. Beliefs in lucky and unlucky days are very ancient and have a wide geographical distribution, and in Egypt we have evidence that every day in the year was classified as good or bad, or as partly good and partly bad. Many days in the year were the anniversaries of various events in the mythological history of the gods, and thus acquired a happy or an unhappy reputation according to the nature of the event commemorated.

We need not here go into any detail as to the nomenclature employed in Egyptian dating, but may merely repeat the well-known fact that the year was divided into three seasons of four months each. These months were each of thirty days, making 360 in all, and from very early times five extra days, known as the  "the five days over and above the year"¹ or the Epagomenal Days, were interpolated between the last day of the old year and the first day of the new, in order to bring the vague civil year into line with the solar year of 365 days. This equation, of course, was not accurate, for in every fourth year the civil year was almost one day shorter than the solar year, which in course of time with cumulative error threw all reckoning out of gear. This aspect of the question, and the steps which were taken to correct it, likewise do not now concern us, but we will merely confine ourselves to the statement that in the year of 365 days each day had its calendrical name, as with us. The three seasons were , 'Akhet (Inundation), , Prœt (Spring), and , Shōmu (Harvest). In dated documents of Pharaonic times the months were cited by their numbers, i.e. 1st, 2nd, 3rd, or 4th month of each respective season. If they had names in ancient times, these names were not used in dates. Under the Copts and the Greeks the months were referred to by their names. These names were derived from the principal festivals which fell in each month: some betray their origin at a glance, e.g. Thoth, Hathyr, Pachons, and most of the others are scarcely less transparent, e.g. Paophi (Opet), Khoiak (*kî-hr-kî*), Phamenoth (Amenophis), Pharmuthi (the harvest-goddess Ernûtet), Mesore (birthday of Râ), etc.

The first day of the month of Thoth was New Year's Day, although there is evidence that the New Year was reckoned from other dates at certain periods². This, however, does not concern us at the moment, and what has been said above is merely to summarise the usual nomenclature of the days of the year.

Now for the Egyptians every day of the year had its significance, and calendars were drawn up in which each was enumerated in turn and described as lucky or unlucky, or as

¹ *Pyr.* 1961; *Pap. Leyden* 346, 2, 5 *et passim*.

² GARDINER, *Zeitschr. f. äg. Spr.*, XLIII, 136 ff.

good or bad. Two such calendars are preserved in papyri in the British Museum. The first of these is the well-known Papyrus Sallier No. IV, which was long ago the subject of an interesting brochure by Chabas, and to which we will hereafter refer as S.¹ The other is written on the verso of the Budge Papyrus, the recto of which contains the literary text known as the Precepts of Amenemôpe²; this will be cited as B. A fragment of a third calendar of the same type found at El-Lahûn (Kahun) was published by Griffith³; cited as K. In these calendars, for the purpose of designating a day as good or bad, each date was labelled with the sign ⏏ or ⏎ respectively, the "good" sign being always written in black ink, and the "bad" sign in red. K. uses only the sign ⏎ for "bad," but S. usually replaces this by ⏏⏎ and sometimes by ⏏⏏ . The former of these is clearly a corruption of ⏎ ⁴. B. employs only the sign ⏏ . A day might be entirely good, entirely bad, or partly good and partly bad. For good days the notation in K. is simply ⏏ , for bad ⏎ , and for mixed days ⏏⏎ (the converse ⏎⏏ does not occur). In S. and B. each day is considered as consisting of three equal parts, and a wholly good day is accordingly labelled ⏏⏏⏏ , and a wholly bad day ⏎⏎⏎ ⁵. A day of which the first two-thirds was good and the evening bad, was marked ⏏⏏⏎ , and so on. In the accompanying plate, and henceforth in this article, the formulae are expressed in English letters: GGG, BBB, GGB, etc.

These three calendars cannot be compared as equal with equal. They belong to widely separated periods, K. being of Twelfth Dynasty date, S. of Nineteenth and B. of Twenty-first, or even later. The first-named comes from the Fayyûm, where it is possible that considerable differences in the observation of feast-days might have obtained as compared with the corresponding events at Thebes, from whence the two other documents hail, even if they were contemporary in date. Moreover K. is a mere fragment, and contains one month only, although it has its thirty entries complete. S. is a school-book, and, as might be expected, the text abounds in errors and corruptions. Presumably it was originally complete, but in its present state the first eighteen days of the month of Thoth are lost from the beginning, and the last nineteen days of Pachons and the whole of the months of Payni, Epiphi and Mesore are missing from the end, as are also the Epagomenal Days, if they were ever included. B. is quite complete for each day of the twelve months, but the Epagomenal Days are not included. It consists of twelve columns of consecutive monthly dates, each marked with its "good" or "bad" notation, but without any explanatory text. S., on the other hand, usually states some mythological event connected with the date from

¹ Brit. Mus. 10,184 recto. First published in lithographic facsimile in *Select Papyri*, Pls. 144 ff. Republished in colotype in *Hieratic Papyri Brit. Mus.* (2nd ser.), Pls. 88 ff. CHABAS, *Le calendrier des jours fastes et néfastes*, Chalon-sur-Saône, 1870: reprinted in *Œuvres diverses*, II, 127-235.

² Brit. Mus. 10,474 verso. Facsimile in *Hieratic Papyri Brit. Mus.* (1st ser.), Pls. 31-32. The recto is published in *op. cit.* (2nd ser.), Pls. 1 ff.

³ *Hieratic Papyri from Kahun and Gurob*, Pl. 25.

⁴ Cf. *Pap. Sallier IV*, 2; *Pap. Leiden* 346. 2, 7 and 3, 1; MÜLLER, *Paläographie*, II, Nos. 113 and 320.

⁵ In S. sometimes ⏏⏏⏏⏏ or ⏏⏏⏏⏏ .

⁶ It is not possible to identify the month represented by K., as the entries do not correspond with those of any month in S. or B.

which the day derives its good or bad character. Besides this, there is often an injunction as to procedure on the day, such as: "go not forth from thy house on this day," "do no work on this day," or "burn no incense on this day"; and sometimes a forecast of the fate of those whose birthday falls upon that date: "whoever is born on this day will die of old age," or "whoever is born on this day will die of plague," etc. From the nature of the context the character of the day is usually apparent, and by this means we are often enabled to correct the palpable errors of the scribe, who, for instance, sometimes writes GGG against a date, which, from its text, is clearly a very bad one, or even omits the notation altogether¹. From what remains of the context we can often restore, in damaged passages, the notation of the days which are lost in lacunae, and from the sizes of lacunae themselves we can often restore the notation with confidence.

In the accompanying Plate xlv, the contents of the three calendars are set out in tabular form to facilitate comparison. In the case of B. the actual notation as stated in the papyrus is given in every instance (a few orthographic corrections are noted at the foot of the plate); but as regards S, I have emended a number of entries where the context or other indications seems to demand such alteration. By this means the two calendars are brought into closer harmony, and they do not differ so widely as would appear at first sight from a comparison of the manuscripts themselves. For the dates whose entries, after every legitimate emendation has been made, wholly or partly disagree, no explanation can be given, since B. has no explanatory text to account for the classification. Having in mind the nature of the two documents, one naturally feels more confidence in B. than in S., but until another complete calendar is discovered, the claims of neither can be vindicated. The entries in S. which I have emended are marked in the plate with a dot, and are as follows:

- Thoth 20, 22, 23. Written GGG, but BBB evidently or probably required by the context.
- Paophi 4. Last sign lost in lacuna, which is, however, too large for G.
- Paophi 15. Chabas reads the first sign as B. Restoration to G seems certain, and is consistent with context.
- Paophi 20. Written BBB, but there is nothing in the text to warrant it.
- Paophi 26. Written GGG, but prohibition of work, etc., in the text calls for BBB.
- Paophi 29. Lost in lacuna, but lacuna not big enough for BBB.
- Hathyr 6. Not stated, but GGG required by context.
- Hathyr 12 and 13. Lost in lacunae: the debris of the text seems to require G rather than B.
- Hathyr 18. Written GGG, but context better suits BBB.
- Hathyr 22. Not stated, but GGG required by context.
- Hathyr 29. GGG should apparently be read in the Budge calendar, see note 2 on plate.
- Khoiak 19. Written GBB, but as the G is in *red*, BBB evidently meant.
- Khoiak 25. The whole entry for this day has been omitted by the scribe.
- Tybi 26. Written BBB, but context suits GBB.
- Mechir 12. Not stated, but GGG required by context.
- Mechir 29. Written BBG, but context requires BBB.
- Phamenoth 17. Written GGG, but context better suits BBB.
- Pharmnuthi 5 and 6. Perhaps these two entries have been transposed, but I have not altered them.

¹ *E.g.* Hathyr 6 and 22 and Mechir 12.

Season $\overline{\text{Y}} \overline{\text{N}} \text{O}$				Season $\square \square \square$				Season $\square \square \square$				Season $\square \square \square$									
I Thoth		II Pachon		III Hathor		IV Khoiak		V Mecheir		VI Pharmachut		VII Pachons		VIII Payni		IX Epiphi		X Mesore		XI Shen	
DAY	S	B	S	B	S	B	S	B	S	B	S	B	S	B	S	B	S	B	S	B	DAY
1	Lost	666	666	666	666	666	666	666	666	666	666	666	666	666	Lost	666	666	666	666	666	1
2	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	2
3	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	3
4	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	4
5	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	5
6	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	6
7	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	7
8	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	8
9	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	9
10	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	10
11	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	11
12	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	12
13	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	13
14	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	14
15	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	15
16	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	16
17	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	17
18	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	18
19	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	19
20	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	20
21	Lost	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	21
22	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	22
23	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	23
24	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	24
25	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	25
26	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	26
27	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	27
28	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	28
29	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	29
30	"	666	666	666	666	666	666	666	666	666	666	666	666	666	"	666	"	666	"	666	30

When 666 is written, the letter is evidently a correction of the former 666. The papyrus is broken away immediately after the sign of day 30 and it is possible therefore that each of these days could be read 666.

Written 666 = 666. The letter is evidently a correction of the former 666. The papyrus is broken away immediately after the sign of day 30 and it is possible therefore that each of these days could be read 666.

Three calendars of lucky and unlucky days.

Written 884 p. ② Written ①0 = ①0. The latter is evidently a correction of the former ③ Sic. ④ Written ①0 = ①0. ⑤ The papyrus is broken away immediately after the sign ① in days 6, 7 and 8. It is possible therefore that each of these days could be read ①0 ①.

Pharmuthi 9. Written BBB, but context suits GGB.

Pharmuthi 23. Written BBG, but there is nothing in the text to justify the BB.

Pharmuthi 30. Lost, but context requires GGG.

Pachons 2. Almost entirely lost in lacuna, but such tiny traces as remain appear to be written in red.

Now B. and S. correspond for a period of 233 days, from which we must deduct two days, because in S. Thoth 21 is entirely lost, and Khoiak 25 was carelessly omitted by the scribe: the calendars are therefore comparable for a period of 231 days. If the above specified emendations are admitted, this comparison gives the following results:

In complete agreement	176	days, or 76 per cent. ¹
In partial agreement	26	" 11 "
In complete disagreement	29	" 13 "
	<u>231</u>	<u>100</u> "

Taking B. as the basis, because complete, out of the three hundred and sixty days tabulated, the following are the proportions of good and bad days in the year:


Entirely good days	190	or 53 per cent.
Entirely bad days	132	" 36 "
Mixed days	38	" 11 "
	<u>360</u>	<u>100</u> "

The Epagomenal Days, as we know from other evidence, were all bad days, and were fraught with such manifold dangers that special incantations were devised for protection on those days, and upon them no work was to be done². Therefore, out of the total of the 365 days of the year, bad elements entered wholly or partly into no fewer than 175, or nearly half the total. It will be observed that the first day of every month in all three of the calendars was GGG, and likewise the last, except in the month of Mechir.

The following table gives an analysis of the proportions of good, bad and mixed days in the calendar B.:

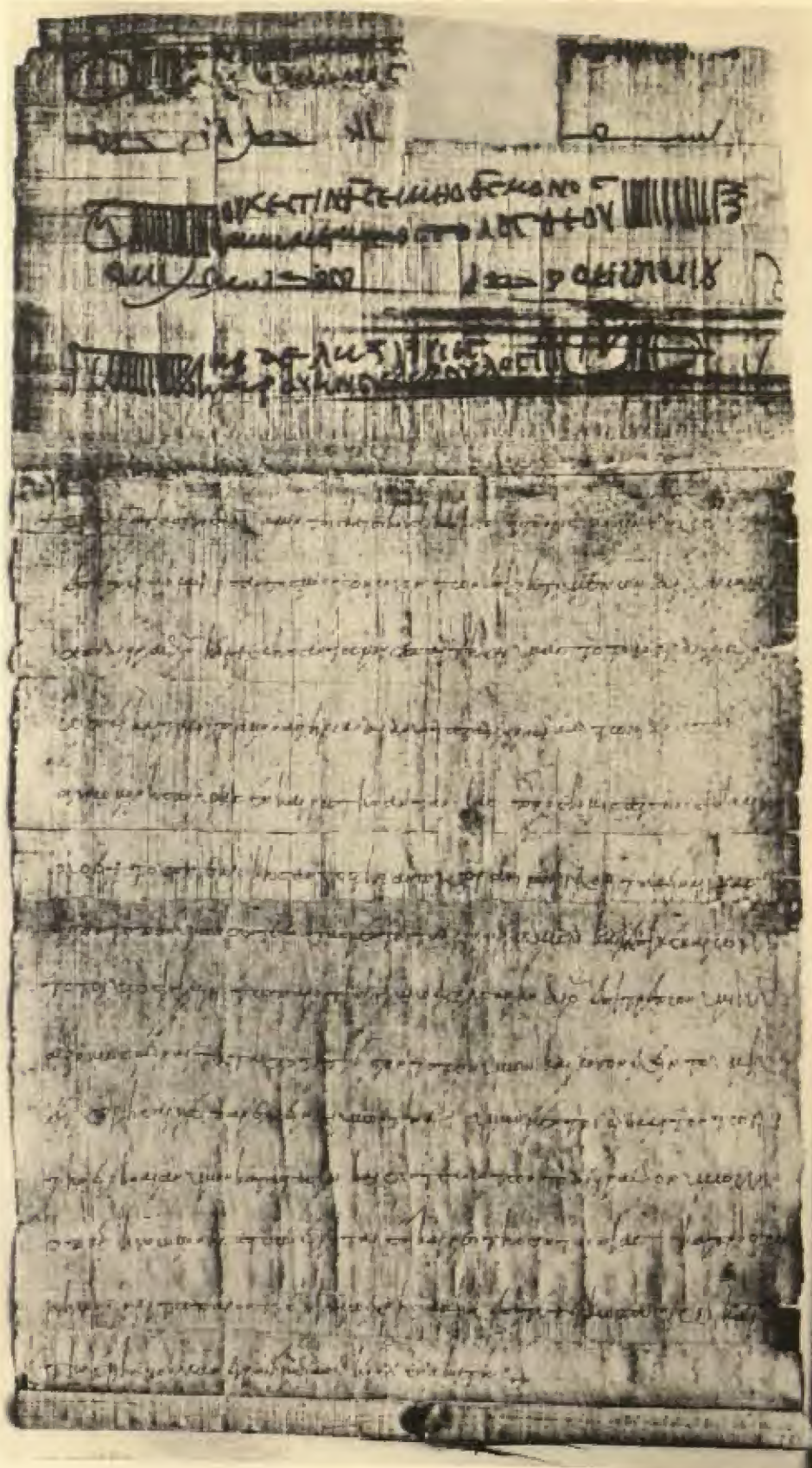
Month	Good	Bad	Mixed
Thoth	14	9	7
Paophi	16	10	4
Hathyr	21	7	2
Khoiak	14	13	3
Tybi	15	7	8
Mechir	14	7	9
Phamenoth	15	15	0
Pharmuthi	13	15	2
Pachons	15	14	1
Payni	17	12	1
Epiphi	17	13	0
Mesore	19	10	1

¹ These percentages are taken to the nearest unit, and disregard decimal points.

² *Pap. Leyden* 346. A calendar of the days themselves, somewhat analogous to the entries in S., is interpolated into the magical text, 2. 7—3. 2. Some of the days are marked with the sign , but all of them are "bad."

It is not within the scope of this article to enquire into the mythological or other circumstances which gave the days their lucky or unlucky character, nor to seek evidence as to whether the injunctions specified in the Sallier calendar were put into actual practice or not¹. I have merely aimed at tabulating the contents of the existing calendars as a necessary piece of preliminary "spade-work" to a fuller study of them.

¹ As a rough and ready test, I selected all the days with regard to which S. has the entry "do no work upon this day," and attempted to apply them to the *Papyrus Chabas-Lieblein* at Turin, which is a diary recording the days upon which the workmen of the Theban Necropolis were respectively idle or at work. Unfortunately, however, the entries for nearly all those days were either missing or destroyed in the Turin papyrus. A great deal of material exists, however, at Turin and elsewhere, for a fuller enquiry into the subject.



Firman from 'Atiyyah b. Ju'aid.

P. Metr. Mus. Accession No. 24.2.4.

TWO OFFICIAL LETTERS OF THE ARAB PERIOD

By H. I. BELL

With Plate xlvī

The two letters published below have no mutual connexion. One comes from Thebes, the other from Aphrodito, one was written by a local official, the other by the Governor of Egypt, one is at New York, the other in the British Museum, one has only recently been acquired and is still unpublished, the other was in part acquired and published years ago. The only justification for uniting them here is that they both belong to the Arab period; and since one is from the Governor, the other from a provincial official, they illustrate well the administrative machinery of Arab Egypt. Even formally they furnish a useful contrast, the Governor's letter being written in one style of hand, that of the local official in another. This difference of style is not due to the difference of origin, for we know from the Aphrodito papyri of P. Lond. IV that both styles were used in the same chancery, though for different purposes. The Governor's letters to the pagarchs (and doubtless to other Greek officials) were written in the sloping, current style of hand derived immediately from the script of late Byzantine letters, a style which affected long down- and up-strokes and carried the linking of letters to the utmost possible extent. Five specimens of this style, as seen in the letters of the Arab Governor Qurrah, will be found in plates 96-100 in the *Atlas of Facsimiles* published with Vol. III of *Greek Papyri in the British Museum*. Earlier stages of the same style are exemplified in facsimiles 38 (ll. 1, 2) and 39 (ll. 1-4) of Sir E. MAUNDE THOMPSON's *Introduction to Greek and Latin Palaeography*. On the other hand in the demand-notes (*ἐντάγματα*) addressed, in Arabic and Greek, by the Governor to single villages or hamlets the Greek portion, which regularly followed the Arabic, was written in a hand of a quite different type. This was of the "minuscule" form familiar in vellum MSS. of the ninth and tenth centuries, though it is probably not to be regarded as the direct ancestor of the book hand (see T. W. ALLEN, *J.H.S.*, XL, 1-12). Specimens may be seen in plates vi-viii of C. H. BECKER's *Papyri Schott-Reinhardt*, I, and in facsimiles 41 and 42 of THOMPSON's *Palaeography*; a rather later example, in a more elaborate style and from the Imperial Chancery, is the papyrus letter to Pépin le Bref of which a specimen was given in THOMPSON's earlier *Handbook of Greek and Latin Palaeography* (2nd ed., 1894, p. 144).

The second style of hand (which it will be convenient to call "minuscule," while we may term the other "current") was universally used in accounts, both by the local authorities and in the Governor's chancery. Thus the Aphrodito accounts in P. Lond. IV are all written in some variety of the type. A very fine specimen is that seen in facsimile 41 in THOMPSON's *Palaeography*, while in other accounts the hand is less careful and more irregular. That the same style was employed in the Governor's chancery is a certain inference from the fact that the schedules not infrequently annexed to letters, like that published below (No. 2), are invariably written in minuscule hand, contrasting sharply with the current hand of the letters themselves.

It is this, the minuscule, type of hand which is employed in letter No. 1 below, which is from a local official, probably the Duke of the Thebaid. Lest it should be thought that its use here, rather than the current hand, is due to the difference of origin, it may be pointed out that in P. Lond. 32 = WILCKEN, *Chrest.* 24 (THOMPSON, *Palaeography*, facs. 42), which, though the beginning is lost, was certainly from the Governor rather than from any subordinate official, the same style of hand was employed.

From these facts we may infer, for letters, the following rule, which, though not certain, is highly probable: Official letters addressed to single officials and not intended for publication were written in the current hand; official letters addressed to a multiplicity of persons and intended or adapted for public exhibition were written in the minuscule hand. The demand-notes, which furnished the local officials with their authority for levying taxes, were obviously of this latter type. The same remark applies to No. 1 below, which was addressed to all the inhabitants of Kaukoi and, since it was their security against molestation, was of a public character. Finally, *Chrest.* 24, though, as I have said, it has lost the beginning with the address, was certainly intended for general exhibition, since it requires all the "servants of the Emir el-Mu'minin" to assist in the search for certain fugitives.

In concluding this general introduction I should like to express my indebtedness to Mr. Crum and Mr. Fulton for help with the Arabic names; to the former also for information regarding the Coptic papyri found with No. 1 and to the latter for reading the Arabic portion of the protocol attached to that papyrus.

1. A FIRMAN FROM THE DUKE OF THE THEBAID

(P. Metr. Mus. Accession No. 24. 2. 4. 17 Oct. A.D. 697 or 712. Plate xlv.)

A few years ago Mr. Lythgoe acquired for the Metropolitan Museum of Art, New York, a very fine collection of Coptic rolls found at Thebes. Included among them was a practically perfect Greek letter, with the protocol still attached to the upper part of it and the seal in position at the foot. Both its unusually fine state of preservation and its contents attracted my attention when the collection was deposited temporarily at the British Museum, and in response to a request the authorities of the Metropolitan Museum very generously gave me permission to publish it wherever and in whatever form I pleased. They were further kind enough, after the papyri had arrived in New York, to send me two excellent photographs, one of the whole papyrus, which is here reproduced, the other, on a larger scale, of the letter itself. Neither gives the actual size of the document, which is too big for convenient reproduction on the original scale.

Mr. Crum has sent me the following note on the collection, which he examined on its first arrival in England: "I assume that τοῖς κατοικοῦσι Καύκοις in your text is meant to translate the name $\pi\kappa\epsilon\lambda\omega\lambda$ (var. $\pi\kappa\sigma\tau\lambda\omega\lambda$), 'the Cup,' which is the designation of a monastery occurring several times in the Jême texts. This monastery of $\pi\kappa\epsilon\lambda\omega\lambda$ was that of Abba Paul, 'the great anchorite,' though who he was cannot be said (see *Kopt. Rechtsurk.* no. 106, l. 69). In another of the Metr. Museum papyri (24. 2. 6), which is written by the best known of Jême notaries, Aristophanes son of John, and therefore dates circa 735, three monks are to be sent north to sell their basket-work in the Fayyûm. They are in the text called 'these monks of the $\kappa\sigma\lambda\omega\lambda$ of Apa Paul, in the hill of Jême,' while in the Greek descriptions of them at the bottom each has, after his name, the word $\kappa\alpha\upsilon\kappa\omicron\upsilon$, which I take again to be the attempt to translate $\kappa\sigma\lambda\omega\lambda$. See H. E. WINLOCK and W. E. CRUM,

Monastery of Epiphanius, Pt. I, p. 112; in an Addendum on p. xxvi of the same volume it is suggested that instead of *Kûlah* as the name of a monastery near Kamûlah (N. of Thebes), as recorded on p. 113, note, one should possibly read *Kûkah* and equate this with the Greek καῦκος. Kamûlah is probably not too far north, on the west bank, to be included in 'the hill of Jême,' a rather vague term for the western mountain thereabouts." Mr. Crum adds that the verso of the present letter (which I have not seen) has the single word ἑτληνικον. This I take to stand for ἑλληνικόν and to refer to the fact that the letter is in Greek (see note on l. 21 f.).

There can be no doubt that Mr. Crum is right in taking *Kaûkois* as a translation of the Coptic name, since καῦκη, καῦκα or καῦκος (all three forms occur) is a well-attested Byzantine word for "cup," with a diminutive *καυκίον*. I do not know the locality, but a natural explanation of the name is that the monastery was situated in a cup-shaped hollow of the mountain.

The letter is dated, as usual in the Arab period, by the indiction only and could not therefore be definitely placed without further evidence. Help in identifying the indiction period is given by the protocol at the top, which bears the name of 'Abd el-'Aziz b. Marwân, and a date doubtfully read as the eighth indiction (694-5). The letter itself was written in Phaophi of the eleventh indiction, and 'Abd el-'Aziz ceased (by death) to be Governor in 705. Even if the date in the protocol is wrongly read as η (8) there seems to be only one letter, so that a numeral higher than 9 is improbable; and it was not usual to keep papyrus unused as long as till the eleventh year of the next indiction period (712-3). Hence the obvious date for the letter seems to be 697. This is at first sight supported by the name of the official from whom it came, Ἀτίας υἱὸς Γοεδου, a well-known person, for whom see A. GROHMANN, *Corp. Pap. Raineri*, III, *Series Arabica*, I, 2, p. 58, where a papyrus of 698-9 (P.E.R.F. 587) naming Φλ(αούσιος) [Ἀ]τί[ας εὐκλε(έστατος) δο]ύξ¹ is cited. This papyrus, dated in the twelfth indiction, refers to 'Abd el-'Aziz as Governor, so that the date is assured. Other occurrences of Flavius Atias are noted in the eighth (694-5? not 695-6 as Grohmann) and eleventh (697-8?) indictions. In 694-5(?) he was a pagarch but by 698-9(?), as the document cited above shows, he had become δούξ, i.e. Duke, while in another he appears as Ἀτίας ἀμυρᾶ. In the present letter he confirms a firman of Οὐδοειθ τοῦ ποτὲ διοικήσαντος τὴν ἄνω χώραν, and we may therefore take it that he was either the superior or the successor of that person². The context and the reference to Οὐδοειθ as "formerly administrator of the Upper Country" make the second supposition by far the more probable. The Upper Country is presumably the Thebaid; and we may therefore infer that Atias was Duke of the Thebaid. The name was identified by Karabacek with عطية بن جعيد, i.e. Ἀτιyyah b. Ju'aid. The Aphrodito papyri of P. Lond. IV and others cited on p. xix of that volume mention the eparchies of Arcadia and the Thebaid, and since the title Dux occurs not infrequently it is natural to suppose that it was held, as in late Byzantine times, by the governor of the eparchy with which it is associated, though it does not follow that the functions of the Duke were the same or his powers as extensive as those of his Byzantine predecessor; indeed this is clearly ruled out by the fact that the Governor

¹ The reading is, however, not beyond doubt; for WESSELY, *Wiener Studien*, XXIV, 127, cites the title Φλ(αούσιος) Τίτῳ εὐκλ. δοὺκὶ Ἀρχιδίας καὶ Θεβαΐδος for the year 699. I see no reason why Φλ. Τί[τῳ] should not be read in P.E.R.F. 587.

² GROHMANN (p. 59) questions the identity of the Φλ ατίας υἱὸς γοεδου noted by Karabacek in a reference which he cites with the Ἀτίας of his other references, but the present letter makes it practically certain.

at Fustât corresponded directly with the pagarchs. In my introduction to P. Lond. iv I therefore took the view that the eparchies were still for some purposes administrative units, with a Dux or Duke at the head of each. This view has been questioned by WILCKEN (*Grundzüge*, p. 232) and, less definitely, by STEINWENTER (*Studien z. Pal. u. Pap.*, xix, 7 f.), who are inclined (Wilcken decidedly and Steinwenter by implication) to regard the eparchies as merely geographical expressions and think that the title Dux was at times honorific only¹. I cannot, in view of the evidence, accept this view. In P. Lond. 1412, 16-221 *passim*, we find taxes conveyed to the Treasury by a "notary of the most illustrious Duke," the Duke being unnamed. Were the title honorific it would surely be the personal name, not the title, which would be mentioned. In the same account are frequent references to a pre-payment of tax moneys by the Duke (again unnamed). In Lond. 1444, 20 a "soldier of the Duke" is mentioned. In Lond. 1332, 1333 (A.D. 708), where Basilius the pagarch of Aphrodito is ordered to send certain men to "the commissioners for the fugitives," a schedule added at the foot of the letter gives the names of the commissioners as follows:—Salâmah b. Yukhâmîr for Arcadia, Shuraiḥ b. el-Wâsil for the Thebaid, 'Abd Allâh b. Shuraiḥ for the *λίμνον*, i.e. probably the Nubian frontier. Now in Lond. 1433 (A.D. 706-7) there appears under date Pachon 7 a charge for supplies for ἀμαλῖται² of Shuraiḥ b. el-Wâsil. No title is given, but in 1440, 6 (*circa* 709) is a charge for the wages of seven couriers "of the Duke Shuraiḥ b. el-Wâsil in charge of the..."³. The word δουκός is imperfect, but is supported by a Coptic papyrus in the volume, 1521 (A.D. 709), where (l. 10 f.) reference is made to "Szourae son of Al-Ouasel, the Saracen, set over (ἐπικείμενος) the Thebaid (Θηβαίς)." This is in connection with fugitives, so that it is possible to take ἐπικείμενος as meaning merely that Shuraiḥ was the commissioner responsible for the Thebaid, but the evidence of 1440 favours the normal interpretation of the word as = "governor of." Probably therefore the persons mentioned in 1332, 1333 are to be regarded as the regular governors of the provinces named, who had been delegated by Qurrah to deal with the question of the fugitives.

Again, in B.G.U. 750 (undated) we have a document of surety addressed to the Duke of Arcadia; in CRUM and STEINDORFF, *Koptische Rechtsurkunden aus Djême*, 10, a dispute at Jême is referred to the Duke at Antinoë, the old capital of the Thebaid and the official residence of the Byzantine Duke⁴; in a papyrus quoted but not published by WESSELY (*Wiener Studien*, xxiv, 127) is mentioned a Duke of Arcadia and the Thebaid; in P. klein. Form. 1314 and the RAINER *Führer* (P.E.R.F.), nos. 586, 587 and 588 our 'Aṭiyyah issues demand-notes for taxes in the Fayyum, and finally, in the present document, he gives a firman of protection to the monastery at Jême.

¹ Steinwenter admits some administrative functions for the Duke, and Wilcken leaves this question open. That the title may sometimes have been honorific is possible enough, though I do not see that there is any certain evidence for this. [For Leont. Neapol. ed. Gelzer, p. 62, see my note in P. Lond. iv, p. xix², G. MASPERO, *Org. militaire*, 88¹. I agree with Maspero that this instance cannot be taken as evidence. And in any case we have no right, on such a point, to argue from Byzantine to Arab practice.]

² The word is of doubtful meaning, perhaps Ar. *'dmîl*, a subordinate official, or, less likely, *hammîl*, a porter.

³ τ[^{ov} δου]κ-/ 2(ωρ) vi- Αλωνα[σαλ] επικειμ^{ος} τ^{ov} ε[...]. The letters ov and ε are very doubtful; τν Θ[^ηβαίς] is not absolutely excluded, but seems unlikely. On the other hand a re-examination of the papyrus convinces me that τ[^{ov} δου]κ-/ is right.

⁴ It appears from STEINWENTER, *op. cit.*, 8², that in P. Lond. iv, p. xix, I misunderstood (or Stern mistranslated) the wording of this document, but the error does not affect the evidence of the text as regards the Duke's legal functions.

We thus have to account for the facts (1) that Dukes continued to exercise official functions, mainly but not entirely financial, (2) that though the title was most often employed absolutely it is also found conjoined with a name or names familiar in Byzantine times as those of eparchies governed by Dukes. I do not see how this evidence can be interpreted except as implying that the eparchies, in some form or other, still existed, and that they were governed by officials bearing the title of Duke.

There are indeed some difficulties, which must be frankly admitted. In P.E.R.F. 586 (22 Dec. 694 [not 695 as *Führer*]?) Fl. Atias appears as pagarch of the Arsinoite nome and, to judge from the description, was not yet described as Dux. In the present letter (17 Oct. 697?) he is apparently Duke of the Thebaid. In P. klein. Form. 1314 (697-8?), where he is described merely as Duke, he issues a document relating to taxes, apparently in the Fayyum; cf. also P. klein. Form. 1186 (12th indiction, 699-700?), where he also appears merely as Duke, in a document concerning land in the Heracleopolite nome. In P.E.R.F. 587 (20 Aug. 699?) a decree of 'Abd el-'Aziz is announced "durch den arsinöitischen Pagarchen Flavius Atias"; and finally, in the papyrus cited by Wessely, Fl. Titus occurs as Duke of Arcadia and the Thebaid in 699 (no month mentioned).

On the face of it this evidence does suggest that Atias, after being Duke of the Thebaid, had become once more pagarch of the Fayyum with the honorary title of δούξ; but it is not so strong as it looks. In the first place we do not know the exact date of the *Wiener Studien* papyrus. Even if the indiction is rightly identified it may fall after 20 Aug. 699, the latest certain date on which, by Wessely's dating, Atias occurs as Duke. In that case Atias may have been succeeded by Titus between 20 Aug. and the end of the year. But further, it has already been pointed out (p. 267) that the reading in P.E.R.F. 587 is not beyond doubt. It seems at least possible that the true reading is Φλ. Τῷτος εὐκλει(έστατος) δούξ. In that case, the apparent occurrence of two different men as Duke of the Thebaid in the same year falls to the ground, and, what is more, the whole series of dates for Atias is invalidated. We shall see presently that other considerations rather favour a later date for him.

In the second place, though the *Führer* describes Atias as "den arsinöitischen Pagarchen," in the passage quoted by Grohmann from the papyrus he is called merely Duke. It looks as if the description in the *Führer* were an inference from the fact that he occurs in the 7th indiction (P.E.R.F. 586) as pagarch. Since then he had become Duke. The only serious argument in favour of the supposition that an acting pagarch who had once been Duke retained the title as an honorary one is the fact that Atias, after becoming Duke of the Thebaid, continued to issue orders in the Fayyum and the Heracleopolite nome, which were never part of the Byzantine Thebaid. But (1) he may have retained his pagarchy in addition to his governorship of the Thebaid, or (2), since Titus was Duke of both Arcadia and the Thebaid, Atias may also have combined both governorships.

There is a further difficulty in the fact that the papyri published in P. Lond. IV reveal a dual division of Egypt, which it is hard to reconcile with that into eparchies, if the latter were more than geographical. In P. Lond. 1447 we find requisitions for the notaries "appointed for the requisitions of the Lower Country" (κάτω χώρα) and others for those appointed for the Upper Country; and this is borne out by several passages in Severus's *History of the Patriarchs*, for which see P. Lond. IV, p. xxi. Now in the present letter, as we have seen, Ούοειθ is described as τοῦ πατὲρ διοικήσαντος τὴν ἄνω χώραν. Since 'Atiyyah,

¹ See what was said as to the reading, above, p. 267.

who was Duke, was apparently his successor, he was presumably Duke of the Thebaid. Hence the Thebaid and the "Upper Country" should be one and the same; and consequently "Peter, governor of Upper Egypt," who occurs in Severus (ed. EVERTS, *Patr. Or.* v, 52), was a later Duke of the Thebaid. But in Byzantine times there were several eparchies, not two only, Upper and Lower Egypt.

The explanation may be, since a Duke of Arcadia and the Thebaid occurs (see above), that at certain periods these two eparchies were combined in a single hand, forming the Upper Country, while the other two, Aegyptus and Augustamnica¹, were also, permanently or on occasion, placed under a single governor, and were then known as the Lower Country. This is on the whole the most satisfactory explanation, but there is also another possibility. In Lond. 1332, 1333, as we have seen, three commissioners are named, for Arcadia, the Thebaid, and τὸ λίμιτον; and one of them, Shuraiḥ b. el-Wāṣil, for the Thebaid, is shown by other evidence to have been Duke. It is a natural inference that Salāmah b. Yukhāmīr, named for Arcadia, was also Duke². The omission to mention the Delta may be due to the fact that the trouble which was the subject of the ordinance did not extend to that part of Egypt, but it is certainly more natural to suppose that the whole country was included. If so, it may be inferred that Arcadia was equivalent to the Delta (ἡ κάτω χώρα), the Thebaid to the rest of Egypt (ἡ ἄνω χώρα), in which case, though the eparchy-names survived, their application was different. Against this hypothesis may however be set the union of Arcadia and the Thebaid in the hands of one official, which seems very improbable if the two together made up the whole of Egypt, except perhaps during a temporary vacancy.

It will be seen that the question is still beset with difficulties; but at least the general conclusion seems to emerge that the Duke was a regular official with definite functions, and that his administrative sphere corresponded with a geographical division bearing the name of a Byzantine eparchy, or with two such spheres in combination.

The functions of the Duke, though obscure in detail, were largely financial, though that may be due merely to the fact that the raising of taxes was, to the Arabs as to their predecessors, a large portion of an official's duties. They were certainly not limited to finance, since *Kopt. Rechtsurk.* 10 shows the Duke to have had some sort of jurisdiction in civil cases, while in Lond. 1332, 1333 he was charged with a commission in the affairs of the fugitives and in the present document grants a firman of protection. The scope of his financial functions is not easy to determine. Leaving out of consideration the Aphrodito accounts in P. Lond. iv, where his notaries convey taxes from the pagarchy to the Treasury at Fustât and he himself makes advance payments for expenses at Babylon, we have the following clear instances of his activity:—In P. klein. Form. 1186 he notifies an individual cultivator of the amount of land which he is under obligation to sow. In P. klein. Form. 1314 he notifies an individual tax-payer of the amount of his tax-quota. In P.E.R.F. 587 he makes known to the inhabitants of a hamlet a decree of the Governor ordering them to deliver corn to an Arab military detachment. In P.E.R.F. 588 he announces the amount of arrears in the tax-payments. If we leave out of account the last two documents, which are probably exceptional, the other two suggest that the Duke had the duty of notifying tax-

¹ For the history of the Byzantine eparchies see M. GELZER, *Studien zur byz. Verw. Ägyptens*, 2-36. A handy table on p. 36.

² The λίμιτον was in an exceptional position, so that there is no need to take the commissioner for that district as Duke.

and cultivation-quotas to individuals, as the Governor to the hamlets and villages (see below, intr. to No. 2). The centralization implied would be so excessive and, apparently, so impracticable that the inference must be doubted. Possibly there were in the cases noted exceptional circumstances which called for the action of the Duke rather than of the local officials; or again, 'Atiyyah, who is the Duke concerned, may here have been acting as pagarch of the Fayyum, though he does not so describe himself; but in view of the extraordinary centralization involved in the sending of the village demand-notes from Fustât, it is perhaps not wholly impossible that the individual demand-notes should be issued, not perhaps actually from the office of the Duke but at least in his name.

Something must be said as to the name of 'Atiyyah's predecessor *Oύοειθ*. Mr. Crum suggests *واعظ*, *Wâ'id*, as the Arabic equivalent. My own objection to this, that *o* can hardly be used for Ar. *â*, is inapplicable, since, as Mr. Crum informs me, at Thebes the sounds *o* and *d* sometimes interchanged in Coptic and so, presumably, in the local Arabic; but Mr. Fulton further objects to *θ* as representing Ar. *d*. Whether instances can be produced I do not know; certainly in P. Lond. 1362, 6; 1378, 7, *Ανδαλα* = *Handalah*, *d* is represented by *δ*. Further, *Wâ'id*, for which Mr. Crum refers to BROCKELMANN's *Arab. Literaturgesch.* II, 586, seems to be a title or nickname, not a personal name. Mr. Fulton himself favours *غُوَيْث* = *Ghuwaith*, for which name see *Kitâb el-Aghânî*, XIX, 163, *Ṭabarî, Annales*, Ser. 2, p. 179, but to this Mr. Crum objects that he cannot believe that *ou* could stand for Ar. *gh*. The question must be left to Arabists.

It is to be noticed that, in contradistinction to *Oύοειθ*, the name 'Atiyyah was written in a Greek form, *Ἀτίας*. This was probably due to its having been naturalized in Egypt at an earlier period; cf. P. Strassb. 45 (312 A.D.), 44, *Ἀτία Διοσκορόου*, etc. One may compare P. Lond. 1447, 37, etc., where *Umm Yûsuf* appears as *Ομμου Ἰωσηφ*, the current Greek form being adopted for the second element. *Γουιδου*, however, seems to be an attempt at declining *Ju'aid*, a name which can hardly have been naturalized.

The subject of the letter is not less interesting than the administrative problems which it suggests. I have described it as a firman of protection. It is indeed not unlike in purpose to the protections which mediaeval rulers were accustomed to issue to monasteries in Western Europe, though it has reference to a particular occasion. This occasion was an *ἀνταρσία*, a revolt, during which the monastery of *Kaukoî* (in common, we may suppose, with at least some of the other monasteries) had omitted the payment of its poll-tax quota. It is regrettable that the allusion to the revolt is so casual, as it would be interesting to discover some details concerning it. When did it occur? what was the cause? was it confined to the Thebaid or did it affect Egypt as a whole? *El-Makrizî* definitely states¹ that the first Coptic revolt took place in the year 107 (= A.D. 725-6), but that date is certainly too late for the present letter, which therefore reveals the fact of an earlier revolt than that recorded by *al-Makrizî*. In view of his very definite statement we may probably conclude that this earlier disturbance was of a minor character, confined to a few districts and suppressed with little difficulty and therefore disregarded by Arab historians. The mention of the failure to pay poll-tax suggests as at least a possibility that it may have been due to the extension of that impost to the monasteries, which at an earlier period had been exempt

¹ In the Aphrodito papyri *a* and (less frequently) *ε* both occur as equivalent to *d*, but not, so far as I can see, *α*.

² Transl. U. BOURIANT, *Mém. de la Miss. Arch. Fr. du Caire*, 1895, 227.

from poll-tax, and that it may have consisted rather of a refusal (accompanied doubtless by local disturbances) to pay the tax than of a definite rising.

Here, however, we meet a difficulty as regards date. The *History of the Patriarchs* states quite definitely and circumstantially (*Patr. Or.*, v, p. 51) that the poll-tax of 1 dinar a head imposed by el-Aṣḥbagh, son of the Governor 'Abd el-Azīz, who was "wāli and receiver of the revenue," on the monks "was the first poll-tax paid by the monks." No exact date is assigned, but this occurred when "a short time had passed" after the election of the Patriarch Alexander in year 420 of the Era of Diocletian (= 704-5 A.D.). The period of 'Aṭīyyah's official activity has however, as we have seen, been placed in the period 694-700, and he was, on this dating, Duke before 698-9. In 699 Fl. Titus was Duke, and at the time of el-Aṣḥbagh's imposition of poll-tax "Peter, governor of Upper Egypt," occurs in the *History of the Patriarchs* (*Patr. Or.*, v, 52), while in 709 and possibly in 706-7 Shuraiḥ b. el-Wāṣil occupied the position. It is not very probable that 'Aṭīyyah, after vacating the governorship in 699, was re-appointed after 709 and was Duke in the eleventh indiction which began in 712. The explanation may be (1) that the Vienna dating of 'Aṭīyyah's governorship is wrong, (2) that the author of this section of the *History of the Patriarchs* has made a gross blunder about a contemporary event of great significance to him and his public, (3) that the poll-tax, though payable by the monasteries, was that of the secular population, not of the monks themselves. The second explanation may, I think, be ruled out. The third is by no means impossible. We may be certain that a large monastery would attract round it a number of laymen engaged in its service, and we know that at Aphrodito for example among the fourteen principal subdivisions of the pagarchy were five monasteries (see the list, P. Lond. iv, p. xiv). See too P. VAN CAUWENBERGH, *Étude sur les moines d'Égypte*, 125: "la communauté [de Neklone] ressemble à une petite république, composée de cent vingt moines et de deux cents laïques." Moreover, the monasteries had lands, which they leased to tenants (see e.g. P. Cairo Masp. II, 67170), and it is probable that these tenants would pay their taxes through the monastery. In a time of disturbances it would be difficult to collect taxes of any kind, and thus the quotas assessed upon the monasteries for their lay dependents and tenants would remain unpaid.

Nevertheless, it is certainly preferable to take the papyrus as referring to taxes payable by the monks themselves. The poll-tax is referred to as τὰ διάγραφα αὐτῶν (sc. τὰ μοναστήρια), and there is no indication of any distinction within the community between monks and laity in the matter of liability. On the other hand, as we have seen, the traditional date for 'Aṭīyyah really rests solely on P.E.R.F. 587, where owing to mutilation only the letters τι remain, and these would equally well suit the Fl. Titus whom a papyrus dated by Wessely in 699 names as Duke of Arcadia and the Thebaïd. It may be that the whole Atias series of papyri should be brought down to the next indiction period, which would mean, for the present letter, the date 712, thus removing all difficulty as to poll-tax. In favour of the later date is also to be alleged the fact that several of the Coptic papyri of this find seem, from the scribes who occur, to fall well within the eighth century¹. Against it is

¹ I had originally written "the Coptic papyri" without the "several," but Mr. Crum informs me that this can no longer be maintained. Some of the Coptic deeds were drawn up by John Lazarus, the scribe of *Kopt. Rechtsurk.* 35, which was dated in the volume (see p. 464) 750(?) But the fragment of the protocol contains the letters [μεροου], which are clearly part of Ἀβδελουζὺς υἱὸν Μεροου. Hence the John Lazarus documents must be put back to a period during or not long after the governorship of 'Abd el-Azīz, and are probably the earliest of the series.

the date of the protocol, which makes it necessary to suppose that the papyrus was kept for a long time unused.

The date must then be left undecided, but with a preference for 712 over 697¹. In any case the document is of value as revealing a revolt hitherto unrecorded by historians. In editing it I have ignored the lectional signs (see introduction to No. 2) which appear to occur in places on the photograph, with the exception of two (in ll. 18 and 20) which I had noted in my rough copy made from the original while in the British Museum; for in such matters a photograph is never a safe guide.

Ἐν ὀνόματι τοῦ θεοῦ φιλανθ[ρώπου]

ἐλεήμονος. []

بسم الله الرحمان الرحيم

Οὐκ ἔστιν θεὸς εἰ μὴ ὁ θεὸς μόνος.

3 Μααμετ ἀπόστολος θεοῦ.

لا اله الا الله وحده بحمد رسول الله

Ἀβδελαζίζ υἱὸς

Μαρουαν σύμβουλος. Ἰνδικτίωνος η.

+ Σὺν θεῷ· Φλα(ούιος) Ἀτίας υἱὸς Γοεδον ὑμῖν τοῖς κατοικοῦσι Καύκοις εἰς τὸ ὄρος Μεμνονίων.

10 Ἐπεὶπερ ψηλαφήσαντός μου τὸν λόγον τῶν ἐπιζητουμένων δι' ὑμῶν ἀπὸ διαγράφου καὶ θελήσαντός μου ἀπαιτῆσαι ὑμᾶς τὸ τοιοῦτο διάγραφον,

ὥσπερ καὶ τὰ λοιπὰ μοναστήρια δίδουντα τὰ διάγραφα αὐτῶν, διὰ τὸ

ἀγνωμονῆσαι ὑμᾶς ἐν καιρῷ τῆς ἀνταρσίας, προεκομίσατέ μοι σιγίλλιν

Οὐοειθ τοῦ ποτὲ διοικήσαντος τὴν ἄνω χώραν περιέχον τοῦ μέναι ὑμᾶς

15 εἰς τὸν τόπον ὑμῶν, συντελοῦντας μέντοι τὰ διάγραφα ὑμῶν, καὶ ἐπιβεβαίων

τὸ τοι(ο)ῦτο σιγίλλιν τῷ παρόντι σιγιλλίῳ ἐχρησάμην δι' οὗ ἐπιτρέπω[ν] ὑμῖν

ἀφόβως μέναι τῇ ταυτότητι εἰς τὸν τόπον ὑμῶν καὶ λόγον ἔχειν τοῦ μὴ

συγχωρησαί με παρελθεῖν δι' ὑμῶν τινά, ὑμῶν μέντοι φυλαττόντων

τὴν εἰρηναίαν ὑμῶν κατάστασιν καὶ συντελούντων τὸ διάγραφον ὑμῶν,

20 ὅπερ ἠγνωμονήσατε ὡς εἰρηται ἐν καιρῷ τῆς ἀνταρσίας· καὶ πρὸς τὸ

δῆλον εἶναι τῷ παρόντι σιγιλλίῳ ἐχρησάμην, ἐπιτεθεικὼς αὐτῷ καὶ

τὴν ἐμὴν βοῦλλαν. Ἐγράφη μην(νι) Φαῶφ(ι) κ' ἰνδ(ικτίων)ο(ς) ἐνδεκάτης.+

L. S.

13. ὑμᾶς.

18. τινὰ + ὑμῶν.

20. ἀνταρσίας· καὶ. L. τό.

Protocol. "In the name of God the Merciful, the Compassionate. There is no God but God, He alone. Mahomet is the Apostle of God. 'Abd el-'Aziz b. Marwân, Governor. 8th indiction."

¹ Since this introduction was written another argument in favour of the later date has occurred to me. The *History of the Patriarcha* states (*Patr. Or.*, v, 52) that el-Aṣḡagh "forced many persons to become Muslims, among them being Peter, governor of Upper Egypt, ... and the son of Theophanes, governor of Maryât." Fl. Titus, Duke of Arcadia and the Thebaid in 699, was clearly a Christian from his name. The other dukes known to us, all later than 705, were Arabs. Does el-Aṣḡagh's activity mark the beginning of a new policy, by which the dukes were required to be Muslims? If so, the case for bringing down 'Aṣḡayyah to 709-712 is greatly strengthened.

Letter. "In God's name. Flavius 'Atiyyah b. Ju'aid to you the inhabitants of Kaukoi in the mountain of Memnonia. Whereas, on my examining the register of sums demanded of you in respect of poll-tax and desiring to call upon you for payment of the said poll-tax, as also the other monasteries which pay their quotas of poll-tax, because you had defaulted during the period of the insurrection, you exhibited to me a firman of Ghuwaith (?), formerly administrator of the Upper Country, providing that you should remain in your domicile, on condition however that you paid your quotas of poll-tax: Now, in confirmation of the said firman, I have issued the present firman, by which I permit you without molestation to remain as heretofore in your domicile and to take note that I will not suffer anyone to transgress against you, on condition however that you continue to live peaceably and pay your poll-tax, in which you defaulted as aforesaid during the period of the insurrection; and that this may be apparent I have issued the present firman, attaching to it also my seal. Written 20 Phaophi, eleventh indiction."

2. Though a lacuna is marked nothing followed ἐλεήμονος. The more usual arrangement was to end the first line with θεοῦ, thus making the second correspond in length with the first.

7 f. 'Abd el-'Aziz b. Marwān was Governor from 685 till 705.

8. The date, which is not uncommonly but by no means invariably inserted in Graeco-Arabic protocols at this point, is enclosed, as usual, in a sort of cartouche, which occurs among the "perpendicular writing" at the end of ll. 7-8. The reading of the numeral is very far from certain. If correct, it gives us the year 694-5 as the date of the protocol.

The perpendicular writing in front of ll. 1-2 begins, as almost invariably, with the large Φ, which is the relic of the Φλ(αούσιος) of Byzantine protocols; that at the end is imperfect. Before ll. 4-5 we have the apparent η in a cartouche which is common in this position (see the statistics given in *Archiv*, v, 150) and is a survival of the Byzantine δ(ιδά), while at the end is the apparent ξ, a survival of the curved mark of abbreviation after κομιτ (κόμιτος) or ενδοξ (ἐνδοξοτάτου). The perpendicular writing at the end of ll. 7-8 ends with the apparent ε, also usual in that position, which I am unable to explain. For the protocols of the Arab period see now Grohmann's monumental *Corpus Papyrorum Raineri*, *Series Arabica*, tom. I, and for those of Byzantine times P. Oxy. xvi, 1928, introd.

9. εἰς as = ἐν is common in late Greek.

10. δι' ὑμῶν: "from" you, an example of the curious uses of the preposition in the Greek of this period. For a similar use see l. 2 of the following text, and for others P. Lond. iv, xliii. Cf., too, note on l. 18 below.

11. διαγράφου: for this word as "poll-tax" see P. Lond. iv, pp. 168-170.

14. τοῦ μέναι: such usages of the definite article with the infinitive in place of a subordinate clause are very characteristic of later Greek; see e.g. the instances in GHEDINI, *Lettere Cristiane*, p. 322. There are many in the letters of the Arab Governor Qurrah in P. Lond. iv; e.g. 1356, 4-6, ἡ σ(ύ)στασις κτλ. τῶν δημοσίων τῆς χώρας μετ[ὰ] τὴν τοῦ θεοῦ [ὑπουργεία]ν ἐστὶ τοῦ εἶναι τὸν ἐπικείμενον τῆς παγαρχίας κτλ., "the collection, etc. of the taxes of the province is after the service of God the chief reason why the governor of the province should be," etc. Cf., too, l. 17 below.

18. δι' ὑμῶν: "against you"; another curious use of the preposition.

21 f. Cf. WILCKEN, *Chrest.* 24, 8-9, καὶ πρὸς τὸ δῆλον εἶναι τῷ παρόντι σιγγιλλίῳ ἐχρησάμεθ[α τοῖς τε Ἀραβικοῖς] (καὶ) Ἑλληνικοῖς γράμμασιν, ἐπιτ[ι]θέντες ἐν αὐτῷ καὶ τὴν συνήθη[ν ἡμῶν βούλλαν]. The present document was purely Greek, but it is possible that

an Arabic counterpart on a separate roll was issued simultaneously, as with the Governor's letters to the pagarch. This seems unnecessary, since, whereas *Chrest.* 24 was a general proclamation to all the officials, and was probably sent to every pagarchy in Egypt, the present document was intended mainly for exhibition to the local authorities and that too in the Thebaid, a district where Arab influences are likely to have been less prominent than in Lower Egypt; but it is rendered not unlikely by the word *ἑσθλόν* on the *verso*; the purpose of the docket may have been to distinguish this from the Arabic copy. The device on the seal cannot be distinguished on the photograph, and unfortunately I omitted to take a note of it while the papyrus was in the British Museum.

2. A LETTER FROM ʔURRAH B. SHERİK

(P. Lond. 1393 + Inv. No. 2586. 7 Jan. A.D. 710.)

In Vol. IV of *Greek Papyri in the British Museum* was published, among the imperfect and undatable letters of the Arab Governor ʔurrah b. Sherik (A.D. 709-714), a long letter (1393) which had lost not only the beginning but the whole of the right side. From what remained it was clear that the subject was "a requisition for sailors and skilled workmen and for provisions both for them and for the *μάχοι*" [see below], but the details were for the most part obscure owing to the mutilation of the papyrus. By one of the curious chances which are not uncommon in papyrology a large portion of the missing right side was discovered in a consignment of papyri sent to the British Museum for the annual joint purchase in 1924. This restored completely all the lower part of the letter, but the upper part was still imperfect. However the very next year's consignment contained most of what still remained. I have managed to place all the larger fragments; only a few small scraps remain unidentified. The result is that with three exceptions every line represented in Lond. 1393 has now been wholly or almost completed, and it is possible to obtain a practically continuous text for this portion of the letter. The beginning is still entirely lost, though as the upper edge is quite sharp it is possible that it is in existence somewhere and may yet come to light.

It seems worth while to republish the letter in its completer form, because though it does not add anything very novel to the knowledge of Arab administrative methods afforded by the other texts in P. Lond. IV, it is an interesting example of the epistolary style cultivated in the chancery of the Arab Governor and furnishes a good deal of information in detail as to the machinery for the collection of men and supplies for the annual *cursus*. It may be explained, for the benefit of readers not familiar with the volume referred to, that the *cursus* was the raiding expedition despatched yearly under the Umayyad Khalifate against the Byzantine Empire and its dependencies. The sailors employed in these expeditions seem to have been, at this period, mainly if not entirely Christian natives; the Arabs, not by origin a seafaring race, served only as combatants. The term employed to describe them, in this and other letters, is *μάχοι*, a curious substitute for the classical *μάχιμοι*. They were divided into two classes, the *Muhājirān* (*μωαγαρῖται*) or Arab settlers of full blood (in Egypt chiefly the Anṣār and the ʔuraish) and the *mawālī* (*μαυλεῖς*) or persons of non-Arab race converted to Islam.

Besides the sailors, who were raised by forced levy from the native inhabitants, certainly in Egypt and probably in the other provinces also, the equipment of the navy demanded large bodies of artisans, employed in the dockyards of Babylon, Clysma and other centres.

These too were raised by levy, and in the present letter we hear of "artizans" as well as sailors, though the schedule at the foot shows that the expression is inexact, since actually only one artizan (a caulker, *καλαφάτης*) is there demanded.

It is clear from Qurrah's letters that there was, not unnaturally, great reluctance in the rural population to accept personal service and a marked preference for the money composition (*ἀπαργυρισμός*, *adaeratio*) by which, in case of need, a village was allowed to provide, instead of the sailor or artizan demanded, the amount of his wages for the hire of a man elsewhere. For though the service was compulsory it was not unpaid; the persons conscribed received wages according to a regular scale. The evidence of P. Lond. iv establishes the fact that where the man himself, not the *adaeratio*, was provided, the local authorities were responsible for his wages; thus we find charges levied on particular hamlets for (e.g.) "a third of a sailor to serve in person" (i.e. personal service, not *adaeratio*), the meaning being that three of the smaller places were called on to provide a man between them, each paying a third of his wages, and the man himself being chosen presumably by arrangement among the headmen of the hamlets concerned. In the present letter Qurrah demands personal service (l. 28, *εἰ μὴ αὐτὸ τὸ σωματίον*), threatening retribution in case of failure to comply.

For reasons less easy to understand, local authorities seem to have preferred *adaeratio* even in the case of supplies (*δαπάνη*), and in the present letter Qurrah insists that the supplies ordered must all be paid in kind save in the case of the boiled wine (*ἐψήμα*), for which *adaeratio* is demanded. This explains why, in the schedule appended to the letter, though the rate at which the other supplies were to be bought is in each case specified, the total cost is not stated, whereas in the case of the *ἐψήμα* both rate and actual amount are given. In the other cases the only concern was the rate of payment to the purveyors.

It should be added, as an illustration of the extraordinary centralization of Arab government, that though the letters of the Governor to the pagarch, like the present one (which, though it has lost the beginning, is certainly from Qurrah to Basilus, the pagarch of Aphrodito), specify merely the total requisition from the pagarchy, the distribution of the quotas among the single villages, hamlets and monasteries was not left to the local authorities but carried out at headquarters; and each letter (sent in duplicate, one in Arabic, one in Greek) was accompanied by demand notes (*ἐντάγμα*) in Arabic and Greek addressed by the Governor to the single places and specifying their quotas. The calculation was made on the basis of census and tax registers sent by the pagarchs to headquarters, and since each pagarch had his permanent representative at Fustât this person may have been called on to collaborate in the work; but even so such centralization is surprising. The reason may probably have been a well-founded distrust of the integrity of the local officials. This distrust comes out very clearly in the present letter, as in others of the series. While on the one side Qurrah threatens Basilus with exemplary punishment if he neglects any of his instructions regarding men and supplies, he warns him, on the other, in a mutilated passage, not to allow anyone to be unfairly treated. Such warnings are not infrequent in Qurrah's letters, but it must be confessed that he is much more constant in his insistence on full payment of all dues; and if the Arab Government at this period seems to have been in intention just it was also, and much more certainly, hard and implacable.

In expression, as in content, the letter well represents the series to which it belongs. The wordy, rambling style, with constant repetition of the same ideas, and with clause

tacked on to clause, participle piled on participle, and a want of any real unity of construction—this, as well as the curious grammatical usages, is thoroughly typical of the series.

Various details of reading and interpretation are discussed in the commentary, and I have recorded in the critical notes all instances of the lectional signs which are so striking a feature of this document, as of the other Qurrah letters. These, consisting for the most part of dots or apostrophes, seem at times to have been inserted more or less at random, but normally their purpose was (1) to mark a pause in the sense, (2) to separate two consonants coming together, (3) to separate two vowels of which the first ended and the second began a word, (4) to separate words likely to be run together in reading. But there are cases which cannot be classed under any of these heads.

- αὐτοὺς εἴ τι ἐθεματίσ[α]μεν ἐν τοῖς ἡμ[ε]τ[έ]ρ[οι]ς ἐνταγίσις[ις],
αὐτῶν μέντοι παρεχόντων εἴ τί ἐστι δὲ αὐτῶν δημόσιά τε
καὶ ἐκστρατόδυνα, λαμβάνων ἀντιφωνητὰς αὐτῶν
εὐπόρους ὀφείλοντας ἀποδοῦναι τὴν ἀντιφώνη[σ]ι[ν] αὐτ(ῶν)
5 εἰ δόξη τινὰ ἀποδρᾶσαι ἐξ αὐτῶν, πέμπων πρὸς ἡμᾶς]
τὸ κατὰγραφον τῆς ὀνομασίας καὶ πατρωνομίας
καταχωρίους τῶν αὐτῶν ναυτῶν καὶ τεχνιτῶν, φανερο-
ποιῶν ἡμῖν ἐν τῇ αὐτῇ καταγράφῃ τοὺς ἐξελθότας
ὑπὲρ τῶν ιδίων χ[ω]ρ[ί]ων καὶ τοὺς μισθωθέντας ὑπὲρ
10 ἑτέρων καὶ εἴ τι ἐδώθ[η] ὑπὲρ τῶν αὐτῶν ὑπὲρ μισθοῦ, μὴ
ἐκδίδων τινὶ τὸ κεφάλαιον αὐτῶν [ἀ]λλὰ [.]..[.].
ἀποστέλλων· τὰς δὲ δαπάνας τὰς ταγίσας διὰ τῆς διοικήσεως σου
ἀπόστειλον εἰς πληρε[ς] π[ε]π[ο]ιημένας, τυπώνων
ἐπάνω αὐτῶν ἀγθρώπ[ου]ς χρησ[ί]μο[υ]ς π[ε]π[ο]ι[σ]τούς τε κα[ὶ]
15 εὐπόρους μαρτ[υ]ρ[ῶ]ν σ[α] [ὕ]πὲρ ἑτέρων πιστῶν [καὶ]
μὴ εἶναι αὐτοὺς φυρ[α]τ[ῆ]ς ἢ ῥαδιουργούς, καὶ ἐπίτρεψ[ο]ν α[ὐ]τ(οῖς)
πληρωθῆναι τὴν τ[ο]ιαύτ[η]ν δαπάνην ἐκ τῶν χωρίων
μετὰ τοῦ φόβου τοῦ θεοῦ [ὅρω]
δικαίῳ καὶ σταθμῷ ἰσ[ω]
20 πρακτεθῆναι τινὰ ἐν τ[ῇ] τοιαύτῃ διαστολῇ διὰ ?]
τὴν διοίκησίν σου καὶ ἐπισυνγραπτομένω[ν]..[.].
πάντων διὰ σεαυτοῦ μὴ καταθαρρῶν τινί. Καὶ τῶν
εἰς πλήρες ὑποδεχομένων τὴν τοιαύτην δαπάνην
ὥς εἴρηται ἐκ τῶν χωρίων κα[ὶ] τ[α]σκεύασον ποιῆσ[αι] αὐτ(οῖς)
25 ἀποδείξεις ὑπὲρ αὐτῆς, γ[ρ]άφων ἡμῖν τὸ ἴσον τῆς παραδωθείσης
δαπάνης ἐκάστῳ πιστικῷ καὶ πέμπων. Μὴ εὐρωμέν σε δὲ
πέμψαντα ἀπαργυρισμὸν τ[ὸ] σύνολον ὑπὲρ .. τοι[ο]ν[ο]ν [.]..[.].
εἰ μὴ αὐτὸ τὸ σωματίον· [ὕ]πὲρ τούτων ἀποστρέφοντες ἀποδίδουμέ[ν] σοι
ἀνταπόδωσιν βλάβησάν σε· οὐκ ἔχεις γὰρ ἀφορμὴν τὴν οἶαν οὖν
30 περὶ τοῦ σωματίου. Ἐνδρανῶς δὲ ἐνέχθητι εἰς τὸ πρᾶγμα τῶν
δαπανῶν, κρατῶν τοὺς τῶν χωρίων ἀποδοῦναι εἴ τι ἐτάγη δι' αὐτ(ῶν)
ἐν εἰδεσιν, ἄνευ μέντοι τοῦ ἐψήματος, τοῦτο γὰρ ὀρίσαμεν σταλῆναι
ἐν ἀπαργυρισμῷ πρὸς τὴν ἐντεθεῖσαι διαθήμισιν ἐν τοῖς ἡμετ(ἐ)ροις ἐντ(α)γ(ίοις).
λοιπὸν μὴ πέμψης ἔψημα τὸ σύνολον, εἰ μὴ τὸν ἀπαργυρισμὸν,

- 35 οὐ μὴν ἀλλὰ καὶ εἴ τι δ' ἂν ἀδυνατήσωσιν δοῦναι ἐν εἶδεσιν
 ἕκ τε τῆς ἀλυκῆς καὶ τοῦ ὄξ[ο]υς, μὴ συγχωρῶν ἀνυσθῆναι τι ἐκ περιττοῦ
 τῆς θεματισθῆσης διατιμῆσεως, πέμπων τὸ(ν) ἀνυόμενον
 ἀπαργυρισμὸν ὑπὲρ δαπάνης μετὰ ἀνθρώπῳ σου πιστοῦ ὑφείλοντος
 καταβαλέσθαι εἰς πλήρες καὶ μηδὲν παρέχων τοῖς ὑποδεχομένοις
 40 πιστικοῖς τὴν λεχθεῖσαν δαπάνην ὑπὲρ ἀπαργυρισμοῦ ἀλλὰ τὰ μάλιστα
 τούτους ἐξασφαλιζόμενος δεόντως δι' ἐγγράφου ἡμ[ο]λ[ογ]ῆ[α]ς
 αὐτῶν καὶ μαρτυρῶν ὅπως ἰδιοκινδύνως παραδώσωσιν
 τὸ παραδωθὲν αὐτοῖς, κ[α]τ[α]χωρίων παριστούντων[ν σο]ε
 ἀντιφωνητὰς χρησίμους καὶ εὐπόρους τούτου ἕνεκα.
 45 Μὴ ἀμελῆς τέ εἰς τὸ ἀποστεῖλαι διὰ πάσης συντομία[ς] εἴ τι
 διεστέλλαμεν διὰ τῆς διοικήσεως σου λόγῳ τοῦ αὐτοῦ κούρσου
 ἀπὸ τε ναυτῶν καὶ τεχνιτῶν καὶ δαπανῶν· ἐπετρέψαμεν γὰρ τῷ
 παρόντι ἀποστόλῃ ἡμῶν μὴ ἀποστήναι ἐκ σοῦ καὶ ἐστὶ διὰ σοῦ
 τί ποτε τὸ καθόλου ἐν λοιπάδει. Λοιπὸν μὴ γένηται ἀμελίας
 50 καὶ ὑστερεθῇ τι· ἔση γὰρ ἐπιστάμενος ὥς εἰ ἀπομείνῃ τι ἐν
 λοιπάδει μέλλομεν κελεύσει θεοῦ ἀπαιτῆσαι σε αὐτὸ ἐν διπλῇ
 ποσότητι ὑπὲρ παρακοῆς καὶ καταφρονήσεως. Ἐγινώσκων· τοίνυν
 ὥς ἐπισπούδαστόν ἐστι τὸ πρᾶγμα τοῦ τοιούτου κούρσου [ἀ]μελλῆτι
 ἐκτέλεσον, μὴ δίδων κατὰ σοῦ τὴν οἴαν οὖν ἀφορμὴν.
 55 Ἐγγρά(φῃ) μ(ηνὸς) Τῦ(βι) ιβ ἰ(ν)δ(ικτίωνος) η.
 Γινώ(σις), ο(ὔτως)· να(ῦται) ὀν(όματα) ξθ ἐκ νο(μίσματων) ελδ' μισθ(οῦ) σὺ(ν) νο(μίσ-
 ματος) L ἀποτρο(φῆς)· τ(ε)χ(νίτης) α ἦτ(οι) καλα(φάτης) νο(μίσματα) ια σὺ(ν)
 νο(μίσματος) L ἀποτρο(φῆς).
 Δαπάνη(ς) τῶν αὐτ(ῶν) να(υτῶν) (καὶ) τ(ε)χ(νίτου) ὀν(ομάτων) ο μ(ηνῶν) ζ οὔτω(ς)·
 ἐν σίτ(φι) μ(ηνῶν) β ἀρτ(άβαι) ρμ τοῦ ι,
 ἐν ψω(μίοις) μ(ηνῶν) ε ἀρτ(άβαι) τν τοῦ η· ὁσπρέ(ου) ἀρτ(άβαι) πα β/, τοῦ ι·
 ἐλαίου μέ(τρα) μθ τοῦ μέ(τρου) νο(μίσματος) γ' ιβ·
 ὄξου(ς) μ(έτρα) μθ τοῦ ι· ἀλυ(κῆς) κ(όλλα)θ(α) ρκβL τοῦ κ.
 60 Δαπάνη(ς) μάχων σί(του) ἀρτ(άβαι) τ τοῦ ι· ὁσπρέ(ου) ἀρτ(άβαι) ρ τοῦ ι· (καὶ)
 (ὑπὲρ) ἐψή(ματος) μέ(τρα) σμς ἐκ νο(μίσματος) δ' νο(μίσματα) ξαL.

LS

2. παρεχόντων· ἐτι. 3. ἐκτραφ' ἄντα· λαμβάνων, αὐτῶν. 4. εὐπόρους, ἀποδουναί· την. 5. τιν' α',
 καὶ πατρωνομίας; ο corr. from L. 1. πατρωνομίας. 7. αὐτῶν· αὐτῶν (probably the dot was intended to
 be placed after the first ν), φ' αὐερῳ (apostrophe probably intended to follow τεχνιτῶν). 8. ἡμῶν· ἐν.
 10. L. ἰδ' ὄξ. τῷ αὐτῶν. 12. ἀποστελλῶν· τας. L. τηγίστας. 13. πεποιήμενος· τυπώνων.
 14. ἐπ' αὐτῶν. 15. εὐπόρους· μαρτυρῶν. 16. ραδιωρ' γους· και. 17. πληρωθῆναι· την.
 22. καταπαρῶν· τινι. 25. ἴσον. 28. μῆ· αὐτα. 29. σε· ουκ. 32. εἶδεν· ἀνεν. L. ὠρίσμεν.
 33. ἐντεθείσαν· δι' αὐτῶν; second ε of ἐντεθείσαν corr. from η. 1. διατίμησιν. 24. μῆ· πεμψῆς, μῆ· τον
 ἀπαρ· γυρισμον. 35. και· εἰ, εἶδεν. 38. ἀλυκῆς· και. 37. L. θεματισθῆσης. διατιμῆσεως· πεμπων.
 39. ὑπὲρ. L. ἀνθρώπου. 39. καταβαλέσθαι· εἰς πλήρες· και μηδεν· παρεχων. 40. πιστικοῖς· την,
 ἀπαρ· γυρισμῶν. 41. δεόντως. 42. μαρ· τρων, ἰδιοκινδύνως. 43. παραδωθεν· αὐτοῖς, σοῖ.
 44. χρησίμους· και εὐπόρους· τούτου. 45. L. δέ. τι'. 47. δαπανῶν, γὰρ· τῷ. 49. L. ἀμελεια.
 50. ἐπισταμενος· ως, τι· ἐν'. 52. καταφρονήσεως· τοίνυν. 54. ἐκτέλεσον· μῃ, ἀφορμῇ. ἐκτέλεσον is a
 correction. 56. γν' σ'. 60. i both times.

TRANSLATION.

.....[collect] from them all that we directed in our demand notes, while they on their side furnish the amount of their assessment in public and extraordinary taxes; and you are to take from them sureties, who shall be men of means, under obligation to answer for them if it appear that any of them has evaded his obligations, sending to us a register in which are contained the names and patronymics, arranged by hamlets, of the said sailors and artizans. You are to make known to us in the said register those who have (actually) gone out on behalf of their own hamlets, those hired on behalf of others, and the amounts paid for such persons for wages, not allowing to anyone the full amount (?) but sending off..... The supplies ordered from your administrative district you are to send off in full, appointing in charge of them efficient men, who are trustworthy and men of means, calling on them to..... on behalf of other trustworthy men (?) and not to be meddlers or shirkers; and you are to enjoin them that the said supplies be delivered in full by the hamlets with the fear of God, justly and equitably, [and that no] man be unfairly treated in such assessment throughout (?) your administrative district, administering (?) the whole business by yourself and not trusting any [*i.e.* not delegating it]. And when they meet their obligations in full as regards the said supplies from the hamlets you are to cause receipts to be issued for them, drawing up a schedule of the supplies entrusted to each confidential agent and sending it to us. Let us not find that you have sent a money composition for any.....whatever, but only the person himself; (otherwise) we shall in requital visit you with a retribution which will be to your detriment, since you have no excuse whatever with regard to the personal service. Apply yourself energetically to the business of the supplies, constraining the people of the hamlets to pay the amount of their assessment in kind, except for the boiled wine, since that we have directed to be compounded by a money payment in accordance with the valuation contained in our demand notes. You are therefore not to send boiled wine at all but the money payment, as also (the price of) any of the salt and vinegar which they are unable to deliver in kind, not allowing anything to be collected in excess of the official valuation. The money collected by way of composition for supplies you are to send by your trustworthy agent with instructions to pay it over in full; and you are not to pay anything by way of money composition to the confidential agents who receive the aforesaid supplies but are to take from them the utmost possible security by their written contract and are to exhort them to hand over at their own risk the supplies handed to them, to which end they are to present to you hamlet by hamlet efficient sureties, who are men of means. Do not be negligent in despatching with all speed the whole amount assessed on your administrative district for the said raid, both in sailors and artizans and in supplies; for we have instructed the present messenger not to depart from you if you are in arrears with even anything at all. Therefore let there be no negligence and no deficiency; for you will know that if anything be in arrear we shall by God's command exact it from you in double measure for your neglect and contumacy. Knowing therefore that the matter of the said raid is one of urgency perform it without delay, not affording us any cause of complaint whatever against you. Written 12th Tybi, 8th indiction. Schedule, viz.:

Sailors 69 persons at 5½ solidi each for wages with ½s. for maintenance; 1 artizan, viz. a caulker, 11s. with ½s. for maintenance;

Supplies for the same sailors and artizan, 70 persons, for 7 months, viz.: in wheat, 2 months, 140 artabas at 1s. per 10; in bread, 5 months, 350 artabas at 1s. per 8; pulse, 81½ artabas at 1s. per 10; oil, 49 measures at ⅓s. per measure; vinegar, 49 measures at 1s. per 10; salt, 122½ *collatha* at 1s. per 20;

Supplies for the fighting men: wheat, 300 artabas at 1s. per 10; pulse, 100 artabas at 1s. per 10; and for boiled wine, 246 measures, at ¼s. per measure, 61½s.

2. εἴ τί ἐστι δι' αὐτῶν: a good example of the curious prepositional usages noted above (No. 1, 10, note). Probably this use of δι' αὐτῶν to = "due from them" sprang from such a phrase as δι' αὐτῶν ὀφειλόμενα; the participle was left to be understood.

δημόσια τε καὶ ἐκστράordiνα: the two terms cover the whole of the taxes due; see P. Lond. IV, xxv f. Besides its general use as "public taxes," δημόσια also meant the land-tax specifically; see P. Lond. IV, p. 170. ἐκστράordiνα, though used as an adjective, seems to be equivalent to *extra ordinem* rather than *extraordinaria*.

7. καταχωρίους: the reading is doubtful, for the supposed ε, being continuous with the τ of τῶν, may be only the looped beginning of that letter, and an adjective καταχώριος does not certainly occur elsewhere in the Aphrodito papyri. κατὰ χωρίον is not infrequent in the Qurrah letters and in my edition was so printed, but may be intended as a single word. In P. Lond. 1338, 21 and 1339, 5 we have κατάγραφον κατὰ χωρίον; in 1345, 11 τὴν τε ὀνομασίαν καὶ πατρωνομίαν καὶ κ[α]τ[ὰ] χ[ω]ρ[ί]ον τῶν διαστειλ[άντων]; a similar phrase in 1356, 23; and in 1370, 10 γράφον ἡμῖν τὸ κατὰ χωρίον αὐτῶν, a phrase formed on the analogy of κατ' ἄνδρα. It is possible that in all these cases the words would be better written as one, καταχώριον, as an adjective qualifying κατάγραφον understood, though it is also possible that in the present case καταχωριον των was miswritten for κατὰ χωρίον, perhaps even for (καὶ) κατὰ χωρίον. But line 43 here (see note) gives some support to the other hypothesis.

8. ἐξελθότας: for the disappearance of nasals in pronunciation and thence in orthography see MAYSER, *Gramm. der griech. Papyri*, I, 190—194; for ν before τ in particular, 191. But it is also possible (if less likely) that this is a morphological irregularity, like ἡκότων, etc. (MAYSER, 372). Cf., e.g., φυγότα, P. Lond. 1384, 38; εἰσελθότα, Lond. 1384, 36.

10. ὑπὲρ: or ὑπό, referring in that case to the χωρία, but this seems a little strained.

τῶ(ν): for the disappearance of the ν see MAYSER, *op. cit.*, 193.

11. The meaning is obscure. There are the following instances of the word κεφάλαιον in the Qurrah letters: P. Lond. 1339, 16, περὶ κεφαλαίου τινός, "on any subject"; 1349, 32, τὸ πρῶτον καὶ ἀνώτερον κεφάλαιον ὅλων τῶν ἔργων τοῦ ὑπουργοῦ, "the first and supreme object of all the labours of an official"; 1372, 13, εἰς τὸ κατ' αὐτῶν κεφάλαιον, for which in the note I suggested doubtfully "the charge against them," but given the prepositional peculiarities of these texts "the subject of them" is perhaps quite possible. The word also occurs in the fragmentary Coptic text P. Lond. 1578, 4, where Crum notes "perhaps in a sense such as suggested by Bell in 1372." "Subject" seems hardly possible in the present context, and "capital," a sense familiar in loans, is equally inappropriate, but the second sense quoted in PREISIGKE's *Wörterbuch*, "zusammenfassendes rechnerisches Ergebnis, Hauptsumme, Geldsumme, Betrag, Geld," seems possible, the sense being that the substitutes hired (τοὺς μισθωθέντας ὑπὲρ ἐτέρων) were not to receive the sum due to them, but that this was to be sent (ἀποστέλλων) to Qurrah.

12. τὰς ταγίσας: above these words are traces of writing which I have failed to make anything of. They begin and end abruptly, though the surface of the papyrus is intact, and look like a scrap stuck on to the main fragment, but this is apparently not the case. The second letter may be ε.

13. τυπώνων: "τυπώνειν, *formare, effingere*. Glossae Graecobarb. τυπώνει καὶ εἰκο- νίζει τὴν δόξαν," Ducange. Here evidently "appointing." The word does not occur elsewhere in the Aphrodito papyri.

15. Another obscure passage, for which I am unable to suggest any restoration. For πιστῶν one would expect πιστῶς, but the reading is certain.

16. *i.e.* they are not to err by either excess or defect of zeal. The construction of the clause beginning *καὶ ἐπίτρεψον* is confused. The sense is "order them to see to it that the supplies are paid in full," but this is hardly expressed.

20. K. F. W. Schmidt has with much probability suggested (*Woch. kl. Phil.*, XXXIII, 1916, 511) *ζημιοπρακτηθῆναι* (see PREISIGKE, *Wörterbuch*, *s.v.*). It is unfortunate that this should be the one passage still missing from the augmented papyrus.

21. *ἐπισυνραπτομένω[ν]*: the reading, though so many letters are marked as doubtful, is very probable. The word seems to go with *πάντων*.

26. *πιστικῶ*: see P. Lond. 1341, 12, note.

28. *ἀποστρέφοντες*: the verb has the following senses in the Aphrodito papyri of P. Lond. IV: (1) "send back," 1344, 15, 21; 1382, 5, 8, 28; (2) "return" (intransitive), 1433, 323, 401; 1434, 26; 1435, 145; (3) "remit" (?), 1412, 535; (4) "pay back" (?), 1352, 12; 1435, 114, 200; (5) doubtful, 1348, 10; 1449, 85. The meaning "repay" in the sense of retribution, derived from (4), seems likely here.

35. *εἰ τι δ' ἄν*: for this insertion of *δ' cf.* the instances referred to in the index to P. Lond. IV, p. 533.

37. *τό(ν)*: *cf.* note on l. 10.

43. The punctuation and division are uncertain. *χωρίων* is certain and *κ[α]τ[α]* probable, but it is possible to place the comma after *χωρίων* and to read *κατὰ χωρίων*, *i.e.* *κατὰ χωρίον*, the sense being that the supplies from each place were given to a different messenger: "the supplies handed to them, hamlet by hamlet." This however is not the most appropriate passage to mention such a detail, as it deals not with the delivery of supplies but with their conveyance to Fustât, so that it seems preferable to place the comma after *αὐτοῖς*, with the sense adopted in my translation (*αὐτῶν* is of course to be understood). Even so *κατὰ χωρί(ο)ν* may be the reading, but *καταχωρίους* in l. 7 (see note) suggests that *καταχωρίων* here may be an adjective.

48. *καὶ* is equivalent to *καὶ εἰ*; *cf.* P. Lond. 1338, 8. Similarly in 1346, 16, *ἔση γὰρ ἐπιστάμενος ὥς ὑστερήσῃ(ς) τὸ ὅτι οὖν... μέλλεις ταῦτα διὰ στρατῆς βασιτάξαι ἕως... Κλύσματος, ὥς* stands for *ὥς εἰάν*.

53. *ἐπισποῦδαστον*: in the original edition I read *επισποδαστον*, but probably the *υ* was made continuously with the loop of the *δ*.

56. $L = \frac{1}{2}$, $L\tilde{\delta} \frac{1}{2} + \frac{1}{4}$, *i.e.* $\frac{3}{4}$.

ἀποτρο(φῆς): this probably refers to maintenance during the journey to headquarters. $5\frac{3}{4}$ solidi per man was the rate of wages, half a solidus being further allowed for *ἀποτροφή*. *Cf.* P. Lond. 1334, 3, note; 1434, 19, note.

ἡτ(οι) in these texts is exactly the equivalent of our "viz."

57. *τοῦ ι*: this and similar expressions mean "at the rate of *x* artabas (*collatha*, etc.) to the solidus."

58. The corn allowance was made for two months in wheat (*σῖτος* at this period regularly = wheat as opposed to *κριθή*, barley), and for five months in loaves of bread.

59. *κ(όλλα)θ(α ?)*: *cf.* P. Lond. 1414, 25, note, and for the measure CRUM and BELL, *Wadi Sarga*, p. 22.

60. It is to be noted that no wages are specified for the *μάχοι*. The sailors and workmen were paid by the villages responsible for them, but the *μάχοι*, who were Arabs or *mawālî*, were paid by the central government, which for this purpose raised a special fund called *ρογά*, their allowances in kind being known as *ρουζικόν* (Ar. *rizk*).

The device on the seal is a wolf facing to the right, with a star in front of it. This was the usual seal in Ḳurrah's letters; *cf.* P. Lond. 1346, introd.

SOME MIDDLE-EGYPTIAN PROVERBS

BY BATTISCOMBE GUNN

All peoples have their stock of maxims, in which some rule of life is compactly formulated. Like small coins, these units of ready-made thought are received and passed on with little question of their validity; for he who quotes a proverb invokes a powerful witness, the experience of mankind. Not only do they, by their inherent authority, serve to give force to a reflection or an admonition, but, aptly used, they have also an importance from the standpoint of style. In both these functions the proverb plays a great part among Orientals; their thought, more formal than our own, expresses itself correspondingly more easily in sententious or allusive sayings of old standing, the use of which is also to them one of the most indispensable graces of language. Thus, to take an example near at hand, no one can claim to speak or write Arabic really well who has not stored his mind with a repertory of *amsāl* to be brought in as occasion offers.

To this love of proverbs in the East the old Egyptians formed no exception, as this little article will help to show. A difficulty arises, however, in forming a collection of Egyptian proverbs, even when one restricts oneself, as I am doing here, to the earlier literature—the difficulty, namely, of recognizing them when one sees them. In such texts as the Instructions (of Ptahhotpe and others), the Eloquent Peasant story, also the letters, one often meets with passages which, to judge by their form and content, may well have been current maxims, but which may also, for all that we can tell, have been only personal expressions of the writers' thoughts. Inclusion of such passages in the collection would have been an uncritical proceeding; but some examples of them will be found appended below.

Only in the three following cases is there a reasonable probability that we have to do with a genuine proverb:

- A. When the passage is definitely referred to as a saying.
- B. When the context less directly leads us to believe that a proverb is being quoted.
- C. When a sentence which occurs in more than one text has a proverbial appearance.

In this case direct borrowing is indeed possible, the more so if the works in question are fairly widely separated in time; but it is usually a justifiable view that the writers are independently drawing on a common fund.

The following dozen passages conform to one or other of the three tests, and are classified according to the latter.

CLASS A.

1. *A man's virtue is his memorial: the evilly-reputed one suffers oblivion*¹. Mentioned as "that sentence that is in the mouths of the great".

2. *The poor man's name is mentioned (only) because of his master*². Introduced as "the proverb (?) that people say".

¹ *Mw pw nī ā nfrw-f: imh pw bin-bl*. University College Stela of Mentuhotpe, last line; pub. GRAFFITH in *Proc. Soc. Bibl. Arch.*, xviii, 195 foll.

² *Ts pf hrī rī wrw*.

³ *Dwtw rn nī hrw hr nb-f*. Peasant, B 1. 20 = R. 70.

⁴ *Pt hn nl mdt ddt rmt* (B 1): variant *pt ddt rmt*, "that which people say" (R). In the *hn nl mdt* of B 1 we very likely have the Egyptian for "proverb"; *ts*, "phrase," and *dd*, "saying," being more general in meaning.

3. *Doing right is the breath of the nostrils*¹. That is, justice and honesty are essential to the life of the community. Referred to as a "saying" (*dd*).

4. *The hungry man must hunger* (?)². Translation, and therefore also the meaning, are doubtful. Introduced with the words "see, it is said".

CLASS B.

5. *Half life is better than dying altogether*³. Introduced by words (*r dd*) which may perhaps be paraphrased "as it is said," but which may merely mean "that is to say."

6. *Help him who helps you*⁴. Referred to as an official's "motto" (*ts*) and thus very probably a proverb.

7. *Help him who is acting, to cause him to act*⁵. This seems to mean: help one who is working so as to further his work. Referred to as a "commandment" (*wed*). It seems to be alluded to in a passage: "no one at this time helps him who is acting"; if this is so, it is related to Class C. It has been thought⁶ that reciprocity is the theme, its meaning being expanded to "work for (i.e., help) him who is working, to cause him to work (for you in return)," in which case we should have to do with a more cogent variant of no. 6; but the wording hardly sustains this interpretation.

CLASS C.

8. *A valiant man has renown from what he has done, not becoming obscured in this land for ever*⁷. This seems to have been popular in the Eighteenth Dynasty, for we find it three times in that period: once in the well-known inscription of Ahmose the Admiral⁸, and twice⁹ in state inscriptions of Tuthmōsis III. Compare the passage, much earlier than these, "a man's renown from what he has done shall not diminish"¹⁰. In all four cases the context deals with deeds of war.

9. *There's no one who knows his lot when he plans the morrow*¹¹. Variant: one knows not the events when one (tries to) discern the morrow¹². This occurs twice: in the Instruction of Ptahhotpe¹³ (where different MSS. give the two forms) and in an unpublished dialogue of the Middle Kingdom from the Ramesseum.

10. *There is no chance of tarrying in Egypt*¹⁴. That is, we must all die some time. Occurs twice: in a poem in praise of death¹⁵, of the Eighteenth Dynasty, and again in a Nineteenth Dynasty inscription¹⁶.

11. *One knows not what may be in the heart*¹⁷. That is, in someone else's heart: a man's secret thoughts or purpose are inscrutable. Occurs three times: once in the Instruction of

¹ *The pw nī fnd irt mīst*. Peasant, B 1. 146.

² *Hkr r hkr*. Unpublished Eleventh Dynasty Letter at Metropolitan Museum, New York.

³ *M-tu dd-tu*.

⁴ *Nfr gā nī Gnhy r mī m zp wē*. Same source as no. 4.

⁵ *Ir n ir(r) n-k*. Peasant, B 2. 108.

⁶ *Ir n ir(r) r rdit irf*. Peasant, B 1. 109-10.

⁷ *N ir-tu n ir m tī st*. Suicide, 116.

⁸ VOGELSANG, *Kommentar zu den Klagen des Bauern*, 102.

⁹ *hē rn n kn m irt-n-f, an htm m tī pn dt*.

¹⁰ *Urk.*, IV, 2.

¹¹ *Urk.*, IV, 684, 780.

¹² *Nn irti rn nī sī m irt-n-f*. Petrograd Pap. 1116 A, recto, 107-8.

¹³ *Nn wn rh hkrw-f, kt-f dwtw*.

¹⁴ *N rh-n-tu hprt, dt-f dwt*.

¹⁵ Ptahhotep (Dévaud's edition), 345, 343; the L¹ reading is apparently faulty.

¹⁶ *N hpr-n isē m Ty-mri*; literally, tarrying in Egypt does not happen.

¹⁷ Published by GARDINER, *Proc. Soc. Bibl. Arch.*, XXIV, 165 foll.

¹⁸ SHARPE, *Egyptian Inscriptions*, I, 97. 12.

¹⁹ *N rh-n-tu wnnt m ib*.

Ptahhotpe¹, as a warning to use tact in conversing with a great man, and twice² in the Eloquent Peasant story, where its exact relevance is somewhat obscure.

12. *It is what God commands that happens*³. Man proposes... Occurs twice: in the Instruction of Ptahhotpe⁴, and in the inscription of the Ethiopian Tenetamün⁵, very many centuries later. Here we may have a case of borrowing.

Such is the handful of proverbs which is all I have been able to gather from the texts down to the Eighteenth Dynasty. The documents of later times would certainly yield many more; but they do not come within the limits that I have set myself.

A word may be said on the tendency of these sayings. The largest class is formed by 2, 5, 9, 10, 11, which are reflections on life and humanity. Of these, 2 states, perhaps a little ironically, the social unimportance of the poor, 5 would resign us to privation, 9 is of vicissitude, 10 warns us of mortality, and 11 is a reminder how little we know our fellows. 1, 3, 8 have a more definite ethical tendency; 1 (Mark Antony saw things differently) towards general goodness, 3 towards justice, 8 towards valour. 6 and 7 are ethical injunctions to more or less disinterested well-doing. 4 sounds curiously cynical and fatalistic, but the translation is most uncertain. 12, on the vanity of human effort, is the only one having a religious cast.

A few passages which may well have been proverbs, occurring in texts of the Middle Kingdom or earlier, are here added. I will again point out that since with these passages the criteria set forth above are lacking, we have no evidence that they are anything but what they purport to be, namely original thoughts of the authors of the texts in which they are found. But even so they have some interest apart from their contexts as specimens of Egyptian wisdom.

*The repute of the just man is more acceptable than the ox of the evildoer*⁶.

*A good character is a man's heaven*⁷.

*The poor man's property is his breath*⁸. That is, his property is his very life.

*Don't worry over what has not yet arrived: don't rejoice over what has not yet happened*⁹. This dictum combines our proverbs about trouble met half-way and unhatched chickens.

*Don't prepare for the future before it has come*¹⁰. The text adds "one knows not what evils may happen in it"¹¹. This has a similar tendency to our "sufficient for the day...."

¹ Ptahhotep, 134.

² Peasant, B 1. 256 = B 2. 8-9; B 1. 273 = B 2. 29-30.

³ *Wdt ntr pw hprt*; in the later text *wdt ntr pw hpr(iti)-it* (what will happen).

⁴ Ptahhotep, 116.

⁵ *Urak*, III, 72.

⁶ *Šep blt nt ʿkt-ib r bwt nt ir(r) lft*. Petrograd Pap. 1116 A, recto, 128-9. The Moscow MS. has the variant *h* for *šp*: "the just man's repute is more profitable, etc."

⁷ *Pt pw nt it iwn nfr*. Petrograd Pap. 1116 A, recto, 31. There seems to be a play on words here, for *pt*, "heaven," means literally "canopy"; a good character is thus at once a source of bliss and a protection.

⁸ *Tpw pw nt nfr lftf*. Peasant, B 1. 232-3.

⁹ *M wt n att n lit: m h'w n att n hprt*. Peasant, B 1. 271-2 = B 2. 27-8.

¹⁰ *M grg dwt n litf*. Peasant, B 1. 183.

¹¹ *N rhy-n-tw iyt im-f*, literally, "one knows not what comes (evilly) in it," with a play on *lit*, "come," impossible to reproduce neatly.

BERNARD PYNE GRENFELL

b. 16 Dec. 1869. d. 18 May 1926

Dr. Bernard Grenfell was associated with the Egypt Exploration Society for practically the whole of his life as an archaeologist, and contributed very much to the high reputation of the Society among scholars. He came up to Oxford from Clifton as a Scholar of Queen's College in 1888, and, after taking Firsts in Classical Moderations and Literae Humaniores, won the Craven Fellowship in the autumn of 1893, and turned his attention to the field in which he soon became eminent—Egypt and its papyri.

Early in 1894 he joined Professor Petrie at Kūft, to learn the principles of excavation, and during that winter Petrie secured the main roll of the great Revenue Papyrus, which he entrusted to Grenfell for publication. When this, with the addition of some smaller pieces obtained by Grenfell in the following year, appeared under the title of "The Revenue Laws of Ptolemy Philadelphus," it was at once recognised that a notable recruit had been enrolled in the ranks of the papyrologists, and two smaller volumes of texts from papyri purchased by Grenfell during his visits to Egypt assured his position.

His first definite employment by the Egypt Exploration Fund was in the winter of 1895-6, when the Committee sent him out with Dr. Hogarth to investigate the Graeco-Roman sites in the Fayyūm, where they were joined by Dr. Hunt. A season spent mainly on the mounds of Kôm Washm (Karanis) and Umm el-'Atī (Bacchias) enabled Grenfell, starting from the lessons he had learnt from Petrie and Hogarth, to formulate the general theory of papyrus-hunting which has been the guide of all subsequent scientific diggers. In the following winter Petrie was prospecting on behalf of the Fund for likely sites for excavation on the western edge of the Nile Valley above the Fayyūm, and Grenfell and Hunt joined him at what has proved to be the most fruitful source of papyri in Egypt, the rubbish mounds of Behnesah (Oxyrhynchus). A season spent here produced a rich harvest, in which the most sensational item was the "Logia."

As the result of these two expeditions, the Committee of the Fund felt that it was incumbent on them to take steps for ensuring the continuance of the work begun by Grenfell and Hunt, and in 1897 the Graeco-Roman Branch was formed with the object of obtaining and publishing Greek and Latin papyri from Egypt: the original programme was to send out an expedition every other year and to issue a volume of texts yearly. An encouraging amount of support was obtained, and in 1898 the first of the Graeco-Roman Memoirs, *Oxyrhynchus Papyri* I, appeared; in the following winter Grenfell and Hunt returned to the Fayyūm and explored several sites in successive expeditions, in 1902 passing out of the Fayyūm to Hibah: but, experience having shown that no other site was likely to prove as productive as Behnesah, they resumed work there in 1902-3 and continued it in successive campaigns till 1906-7.

An enormous mass of material had now been collected, and, though memoirs had been published steadily, they had not dealt with more than a fraction of the papyri. Unfortunately, Grenfell's health, which had already shown signs of failure, definitely gave way. Not only had the expeditions to be abandoned, but the whole task of editing was thrown

on to Hunt. In 1914 Grenfell was able to resume work, and all the *Memoirs* issued since then contain contributions from his hand: after the war he visited Egypt again, though he could not undertake any excavation, and formed plans for further developments of the activities of the Graeco-Roman Branch, but another breakdown of health compelled him to withdraw to the retirement in which he spent the last years of his life.

Of the outstanding merit of Grenfell's work it is hardly necessary to speak here: it was recognised alike in this country and on the Continent. He was a Fellow of the British Academy, Litt.D. of Dublin, Ph.D. of Königsberg, and D.Jur. of Graz, and his University created for him a Professorship of Papyrology. The bulk of his contribution to papyrological studies can be quickly estimated by looking at the index to any of the numerous treatises in this domain which have appeared of late years: probably quite half the references will be to the *Memoirs* edited by Grenfell and Hunt. And the quality of the contribution does not suffer by comparison with its quantity.

But it may be permitted to one who has been associated with Grenfell both as a student and as an officer of the Society to add a personal note. In the latter capacity, as Treasurer, I had to tide over several years of difficulty, including the war period, and no one could have been more helpful in every way than Grenfell. He was keenly devoted to the welfare of the Society, and was always ready to consider suggestions and develop schemes for keeping things going with a minimum of expense: he constantly tried to secure interest and support in fresh quarters, and never spared himself. He was just as jealous for its reputation in the field: I visited him in three seasons in Egypt, and noted his determination that neither in the conduct of the work nor in the treatment of the workers should anything occur to detract from the honour of the Society or of England. But it is above all as the generous friend in the world of scholarship that many of us will cherish his memory: his great stores of knowledge were always placed at the disposal of workers in the same field, and no desire for personal glory restrained him from sharing his discoveries with others. He was ready to listen to and discuss theories from any source: his appreciation of useful suggestions was ungrudging, his correction of erroneous ideas gentle, and the lack of his counsel and criticism will be widely felt.

J. G. MILNE.

BIBLIOGRAPHY (1925-1926): ANCIENT EGYPT

By F. LL. GRIFFITH

The past year has sufficiently shown that the soil of Egypt is not yet archaeologically exhausted. Mr. CARTER has produced fresh treasures from the tomb (or rather from the coffin) of Tutankhamun, Dr. REISNER is gradually extracting marvels of gold hieroglyphs from the burial chamber of the mother of Cheops, Mr. FIRTH has opened up a new vista in the earliest Egyptian architecture, M. JÉQUIER is revealing the profound interest of the pyramid-field of Dahshûr—and so on wherever an excavator has been at work.

In regard to books, by far the most notable event is the appearance of the first part of the *Wörterbuch der ägyptischen Sprache*, the great dictionary of the Egyptian language which has been in active preparation at Berlin, among scholars of different countries led by Professor ERMAN, for twenty-nine years. The war and its consequences have greatly hindered the work and have modified the scheme proposed for its publication, but financial help from America has made it possible to produce the dictionary and to distribute it at a very moderate price.

In another department, the casting of a special fount of hieroglyphs drawn by Mr. and Mrs. DAVIES for Dr. GARDINER's forthcoming Grammar is a very important event both from the artistic and the scientific point of view.

Ancient Egypt, sources of information in the New York Public Library, compiled by Ida A. PRATT, under the direction of Dr. Richard GOTTHEIL, is a valuable and convenient bibliography of Egyptian literature, limited only by such rare works as are not to be found in the library; it consists of an elaborate subject-catalogue of books and articles on Ancient, Graeco-Roman, and Coptic Egypt followed by a full index according to authors. Cook, *Catalogue of the Egyptological library of C. E. Wilbour* (in the Brooklyn Institute) is reviewed by PIEPER in *O.L.Z.*, xxxviii, 644-645.

An *Index* has been issued to vols. I-VI of *Sudan Notes and Records*.

We welcome the appearance of the first livraison of the *Revue de l'Égypte Ancienne* under the joint editorship of M. BÉNÉDITE (whose death occurred so unexpectedly in Egypt in the spring) and M. CHASSINAT. It is well printed and finely illustrated, and the contents should appeal to students of Greek papyri as well as to Egyptologists in the narrower sense.

The first number of the *Chronique d'Égypte, Bulletin périodique de la fondation égyptologique Reine Élisabeth* (Dec. 1925) contains a report by M. CAPART of the progress of the foundation, and of her work in Egypt by Mlle WERNHOCK. The proposal is made to concentrate on the monuments of Thebes and to publish the late M. LEGRAIN's manuscript notes on the Temple of Karnak.

Mrs. QUIBELL has written another excellent little book for Nile travellers, *A Wayfarer in Egypt*, full of good archaeology and interesting observations, as well as of piquant extracts from early travellers. Her previous work *Egyptian History and Art* is reviewed by RÖRDER in *O.L.Z.*, xxix, 254-255.

BAIKIE's *Egyptian Papyri and Papyrus-hunting* gives an interesting and trustworthy popular account of Ancient Egyptian, Greek and Roman papyri and cuneiform tablets, omitting however all mention of the Aramaic papyri of Elephantine.

PALMER, *The Secret of Ancient Egypt*, which I know only from a German review, may interest those who like to find Freemasonry and other mysteries in the early monuments.

In the latest *Jahresbericht* of the Deutsche Orient-Gesellschaft (Mai 1926) we have the good news that a memoir on the antiquities of the prehistoric cemetery at Abusir el-Melek is almost ready, edited by SCHARFF from MÜLLER's material, and that BORCHARDT is preparing a memoir on the dwelling-houses of Tel El-'Amarna.

G. W. MURRAY, *An English-Nubian Comparative Dictionary*, is reviewed by MEINHOF in *Zeits. f. Äthiopische Sprache*, xvi, 149-151. LANG finds that Barea is related to Nuba, particularly in vocabulary, *Barea und Nuba* in HENSCHKE and MÜLLER, *Folia ethnologica*, II, 21-26.

EBERT's finely illustrated *Reallexikon der Vorgeschichte* is being pushed on with great energy, forming a most valuable and indeed fascinating work of reference. It is full of articles on or references to Ancient Egypt. Since the last report vol. II, B-D, has been completed with four new parts; vol. IV, first half, Fr-Ge, completed with three new parts, second half, Gh-Gy, completed in four parts; vol. V, H, two new parts; vol. VI, I-KI, five parts; vol. VII, KI-, one part.

CONSERVATION.

PILLET, *Rapport sur les travaux de Karnak* (1924-1925), in *Ann. Serv.*, XXV, 1-3, reports on infiltration at Karnak, and LUCAS, *Damage caused by salt at Karnak*, *ibid.* 47-54, points out the nature and sources of the salts and their destructive action, recommending measures for washing out the salt with clean river water, and for chemical and other treatment of the stone surfaces. PETRIE, as the result of his observations at Naukratis, where a large basin of a depth of twelve feet below the canal, and still deeper excavations, were kept dry by evaporation, suggests that an experimental basin with banked sides to keep out the inundation should be dug at Karnak to test whether such a work would be effective in preserving the temple from the effects of flooding, *Ancient Egypt*, 1925, 127.

Work of conservation in the Festal Hall of Tutmosis III revealed Coptic inscriptions and paintings which have now been duly treated by varnishing. PILLET, *Rapport sur les travaux de Karnak* (1924-1925), in *Ann. Serv.*, XXV, 10.

EXCAVATIONS AND EXPLORATIONS.

KERMA. SCHARF reviews the principal results of REISNER's excavations; he takes the view that Kerma was a trading station of the Egyptians in a foreign country during the Old and Middle Kingdoms, that Hepzefai perhaps visited the place but was not buried there, and that the great circular tombs were those of native princes, not of Egyptian governors. *Die Ausgrabung von Kerma* in *O.L.Z.*, XXIX, 89-98.

FARAS. Second half of the description of the great Meroitic cemetery, GRIFFITH, *Oxford Excavations in Nubia* in *Liverpool Annals of Archaeology and Anthropology*, XII, 57-172; description of other Meroitic remains including the fortified enclosure and remnants from a palace, also scanty Meroitic remains from Sanam (Napata), *ib. ibid.*, XIII, 17-37. The first half of the description of the cemetery is reviewed by WIEDEMANN in *O.L.Z.*, XXIX, 35-36.

ERMENNE. Memoir on the Austrian excavations of 1911-12 in cemeteries of the C-group (Middle Kingdom), New Kingdom, the Meroitic and the Christian periods, JUNKE, *Ermenne* (*Denkschriften* of the Vienna Academy, LXVII, 1 Abh.).

EDFU. HENNE gives a brief account of his excavations, 1921-1924, *Tell Edfu* in *Aegyptus*, VI, 285-8. The second of his full reports describes the continued clearance west of the temple. The Arab remains cease after the tenth century; in one part the Graeco-Roman age has been reached, yielding terra-cotta statuettes, etc. *Tell Edfu, 1923 et 1924* (*Fouilles de l'Inst. Fr. d'Arch. Or., Rapports prélim.*, II, pt. 3).

THEBES. *West Bank*. At Dér el-Medīnah clearing was continued in both the northern and the southern parts of the necropolis, recovering a number of stelae and showing the disposition of tombs where they had been previously excavated without published record, BRUYÈRE, *Deir el Médīneh 1923-1924* (*Fouilles de l'Inst. Fr. d'Arch. Or., Rapports prélim.*, II, pt. 2). The work of 1925 is briefly reported upon by FOUCART in *Comptes Rendus*, 1925, 276-277.

CARTER and MACE, *The Tomb of Tut-Ankh-Amen*, I, is reviewed by GLANVILLE in *Journal*, XI, 342-343. LYTCHOE reports no new excavations during 1924-1925, but a season of clearing up arrears, *The Egyptian Expedition 1924-5* (*Bull. Metr. Mus.*, March, 1926, Part II); *ibid.* 5-32, WINLOCK, *The Museum's Excavations at Thebes*, describes the completion of plans and the examination, preservation and despatch of antiquities left over from previous years, including a large series of fine coffins of Dyn. XXI from Dér el-Bahrī found in 1924, masses of objects from foundation deposits of Hatshepsut, plan of the tomb of queen Neferu with discovery of an access made specially in Dyn. XVIII when the façade was hidden by the porch of Hatshepsut's temple, and completion of the clearance of the temple ramp. In the tombs there was again abundant evidence of cheating and plundering by the undertakers. *Ibid.*, 41-51, DAVIES, *The Graphic Work of the Expedition*, cleaning and copying the tomb of the vizier User revealed a scene of his election as assistant to his father Amethu, and interesting scenes of foreigners and tribute.

YEIVIN, *The Mond Excavations at Luxor, Season 1924-25* (*Liverpool Annals of Archaeology and Anthropology*, XIII, 3-16), reports on the continued clearance and repair of the great tomb of Ramose, vizier of

Amenophis III and Akhenaten, discovered by Mr. Mond in 1924, with a new tomb, 336 (Miss Moss tells me that this should be numbered 331); clearance behind the Ramesseum and discovery of the tomb of Hat-ay, No. 324. EMERY, *A relief from the Tomb of Ramose at Thebes*, in *Journal*, XI, 125, exhibits a fine head of the vizier.

The following tombs can be added to the large survey maps of Thebes, thanks to Mr. ENGELBACH's initiative: Dér el-Medīnah, tombs 335-339 discovered by the Institut Français in 1924-25, *New Details for insertion in the Theban 1-1000 scale maps* in *Ann. Serv.*, XXV, 174-177 (BRUYÈRE), Sheykh 'Abd el-Kurnah and Dirā' abu'l-Nagā, tombs 341-344 discovered by MOND and EMERY, *ibid.* 239-241 (DAVIES).

MEDAMÛT. FOUCART reports briefly DRIOTON's clearance of the temple in *Comptes Rendus*, 1925, 276.

East Bank. PILLET reports on Karnak:

In the temple of Amūn the western quay appears to have been originally a canal, the river now running at a considerable distance westward. The avenue of sphinxes to the first pylon was of Ramesses II, rearranged after the time of Painotem of Dyn. XXII. The south-west columns of the hypostyle hall threatening to fall, investigation of the bases showed that they were set on blocks taken from buildings of Amenophis IV of which it is calculated that nearly 170,000 blocks must have been used for this alone.

In the pylon of Amenophis III the chief task was the extraction of the huge roof block of the alabaster sanctuary of Amenophis II from the foundations. Most of the plain blocks of sandstone were found to have been marked for their destination in red paint at the Silsilah quarries.

The enclosure wall on the south of the temple has been cleared revealing new particulars in the plan.

The blocks of the building of Tirhaka by the Sacred Lake, a temple of Osiris, are being studied by DRIOTON.

The eastern temple of Ramesses II has been made secure.

The south façade of Pylon VIII has been cleared and the part in front of the first pylon made intelligible. At the western entrance the base of the north colossus of Ramesses II on the east side was found to contain a block of the alabaster sanctuary of Amenophis II; this had been re-used by Ramesses II to make a stela recording his marriage with the Hittite princess and then again re-used to support his own colossus! After this, the most important find was of a fragmentary statue of Harmakhis, son of Shabako, high priest under Tanutamūn.

In the region north of the Temple of Amūn and west of the Temple of Mont, the sebbākhn had revealed portions of a building of Ankhnas-Neferebroc, daughter of Psammetichus II, which can be identified as a temple of Osiris "Pameryes." These remains are now taken care of. A chapel of Nitocris, her spiritual mother, has been found west of it. PILLET, *Rapport sur les travaux de Karnak (1924-1925)*, in *Ann. Serv.*, XXV, 1-24.

EL-'AMARNAH. In 1924-5 the excavation of the North Palace was completed, a large storehouse for corn found, and several buildings of the same age cleared at the extreme north end of the bay; from these last came a statuette of the Old or the Middle Kingdom, WHITTEMORE, *The Excavations at El-'Amarnah, season 1924-5*, in *Journal*, XII, 3-12.

EL-HĪRĀH. Memoir on the German (Freiburg and Heidelberg) excavations of 1913-1914. The temple was in a worse state of ruin than at the time of its discovery twenty years earlier; with BREHR's help the remnants were cleared and the plan recovered. Except this, only Roman and Christian remains were met with. RANKE, *Koptische Friedhöfe bei Kerdā und der Amontempel Sesoschons I bei El Hibe*.

FAYYĒM. At Kūm Aushīm the University of Michigan has cleared a temple of Serapis(?) and found papyri, etc., but the main effort is to recover the topography and history of the town. BOAK, *The University of Michigan's excavations at Karanis 1924-5*, in *Journal*, XII, 19-21.

Reports from Miss CATON-THOMPSON on the levels, etc. of Ptolemaic and prehistoric sites, and from Miss GARDNER on the geology, *Research in the Fayum (Ancient Egypt, 1926, 1-4)*. It is at a level of about 200 feet above Birket-el-Kurūn and 50 feet above sea-level that bone harpoons and pottery, the latter very ill-preserved owing to salt incrustation, are found in settlements, etc. with typical flints. CATON-THOMPSON, *Preliminary Report on Neolithic Pottery and Bone Implements from the Northern Fayum Desert, Egypt*, in *Man*, XXV, 153-156.

LISHT. The temple of Sesostri I, probably less utterly destroyed than any other pyramid temple of Dyn. XII, has yielded most of the plan to close study with the help of the analogous Dyn. V temple of Sahn-rec. LANSING, *The Museum's Excavations at Lisht*, in LITTON'S *Report of the Egyptian Expedition 1924-5*, 33-40.

MEMPHITE NECROPOLIS. The southern part of the necropolis has been untouched for many years. The

Service des Antiquités, having resolved to extend its activities here, has confided the investigation of the southern half, extending from the southernmost stone pyramid ('rhomboidal pyramid') of Dahshûr to the Pyramid of Pepi I at Saqqârah, to M. JÉQUIER with Mr. DUNHAM as his assistant.

At Dahshûr the avenue to the Pyramid of Sesostriis III has been examined. It runs obliquely south-eastward and must have been lofty where the fall of the ground was steep. Here it consists of a stone-faced crude brick ramp, originally with passage along the top roofed and sculptured, the ramp enclosed between plain crude brick walls. Beyond the foot of the cliff it was pierced by a passage for the road along the edge of the cultivation; the bridge of the ramp has disappeared entirely, but the spring of a vaulted roof to the passage is still visible in the brick side-walls. A similar bridge was found by DE MORGAN at the corresponding position in the avenue of Amenemmes III though its purpose is only now explained.

The Rhomboidal Pyramid, of magnificent design and workmanship, has much of the fine limestone casing in place. Some of the passages and the imposing funerary chamber have now been cleared. The junction of the double enclosure wall with the approach is rounded like the angles in the buildings around the Step Pyramid and it is certain that the building is older than Dyn. IV.

At Saqqârah, the Mastabat el-Farûn proves to have been the burial place of Shepseskaf, the successor of Menkaure at the end of Dyn. IV; built of local limestone it was cased with fine limestone from Tûrah except the lowest course of red granite. The foundations are traceable and the remains of the approach are considerable; the south and east sides of the mastaba and a substantial length of the approach are now clear. Priests of Shepseskaf of the Middle Kingdom were buried in small brick tombs east of the temple. Everything was plundered and a statue of the king in black schist reduced to very small fragments at a very early date. JÉQUIER, *Rapport préliminaire sur les fouilles exécutées en 1924-1925 dans la partie méridionale de la nécropole memphite*, in *Ann. Serv.*, xxv, 53-75.

In another place JÉQUIER tells us that the identification of the king was due to finding a fragment of a bas-relief of Dyn. XII showing his funerary cult, followed by the discovery of fragments of a statue, one of which had remnants of a cartouche -*kaf*. He suggests that Shepseskaf, like Userkaf who succeeded him, was considered heretical and consequently the casing of his pyramid was removed early, probably by Pepi II; but his cult was revived by a butcher's family in Dyn. XII as a private speculation, no doubt profitably to themselves. He makes further the interesting suggestion that the object of these vast pyramids, as of the vast funerary temples of a later time, was to impress the people with the influence which such mighty kings would have with the gods, and so cause future generations to continue addressing their prayers and offerings to them even if their proper endowments were confiscated or misappropriated; in short, the pyramids were a means to insure the happy existence after death of the kings who built them, and were not mere monuments of vanity. *Le Mastabat-el-Farâou et le culte funéraire de Shepseskaf* in *Comptes Rendus*, 1925, 251-261.

In the northern half of the necropolis Mr. FIRTH continues his labours. The two stepped mastabas north east of the Step Pyramid are probably of the princesses Intkaes and Hetephernebti, already known from remains found at Heliopolis by SCHIAPARELLI; in the rubbish are fragments of many stelae with their names, the name of the king and the symbol of Anubis, probably boundary stelae thrown away after the buildings were constructed. Near by, against the north wall of the pyramid, was a serdab with a statue of the king, of life size and nearly perfect. West of this was a ramp leading up to a terrace on which are traceable the foundations of a chapel. The pyramid itself had been cased with fine limestone. Rubbish from an ancient clearing of the chambers yielded fragments of vases, many bearing inscriptions of earlier kings. The blue tiles which were in two of the chambers had been held in place by fibre (not by copper wire) till the plaster had set.

South east of the pyramid was a rectangular court of rubble walling with a series of small roofless chapels built against the walls, and at the north end a chamber with four statues, probably of the king and queen with the two princesses. Over the chapels was an upper storey, the façade of which had fluted pilasters with very remarkable capitals of two leaves turned downwards. On the west side of this was another remarkable chapel. Throughout, the workmanship and sculpture is fine and shows that there must already have been a long tradition of stone masonry, but the design is in most cases different from anything that appears subsequently. FIRTH, *Excavations of the Department of Antiquities at the Step Pyramid, Saqqara (1924-1925)*, in *Ann. Serv.*, xxv, 149-159.

GLIZAL. A new survey of the Great Pyramid has been made. After necessary excavation of certain points, it corroborates the survey of FLINDERS PETERIE made in 1881 under much worse conditions; but it is now found that the east face shows a difference of about 3 degrees in orientation from the rectangle

given by the other sides. ENGELBACH, *Précis of the survey of Egypt, Paper No. 39, by J. H. COLE, on the size and orientation of the Great Pyramid*, in *Ann. Serv.*, xxv, 167-173.

In the spring of 1925 the work of JUNKER's Austrian expedition, suspended since 1914, was resumed, the object being to complete the plans and other records of its previous work in the necropolis west of the Great Pyramid. A new house also had to be built, and all on slender resources (partly provided by Hildesheim); but with their customary diligence and efficiency, between March 1 and May 11 Professor JUNKER and two architects (HOLEY of Vienna and HÖLSCHER of Hanover) completed their plans, copies of inscriptions, photographs and drawings, and removed and packed the sculptured chapel of a mastaba of Dyn. IV destined for the Pelizäus Museum in Hildesheim. Naturally some deterioration and loss had taken place through the weathering of eleven years. JUNKER, *Bericht über die ägyptische Expedition im Frühjahr 1925*, in *Anzeiger of Vienna Acad.* 1925, 147-154. A second expedition took place from Jan. 4 to Apr. 9, 1926 at the joint expense of the Vienna Academy, the Pelizäus Museum and Leipzig, STEINDORFF and other Germans taking part in the work. The excavation was completed to a distance of 400 metres west of the Pyramid of Cheops; it proved that a broad area was left vacant behind the pyramid during Dyn. IV (when many mastabas were built beyond) but was afterwards occupied by mastabas. The finds included statues and uninscribed sarcophagi, and the tombs and their inscriptions will enable the historian to follow the fortunes of some prominent families. The great prize was the mastaba of Kayemaikh of the end of Dyn. V with interesting scenes and inscriptions, especially in the fully decorated sarcophagus chamber, JUNKER, *Vorläufige Bericht über die Vierte Grabung bei den Pyramide von Gizeh*, *ibid.*, 1926, 63-120.

The Minor Cemetery at Giza, by FISHER, is reviewed by WRZESINSKI, *O.L.Z.*, xxviii, 848-850.

ABU RAWĀSH. Complete clearance of the group of mastabas nearest to the village shows it to have been a local cemetery independent of Zedefre's pyramid, being both earlier and later. Much of the site was occupied by very large mastabas of rubble with stone containing-walls and pits. The surviving inscriptions and sculptures are unhappily very scanty, and everything had been plundered. BISSON DE LA ROQUE, *Abou-Roach 1924 (Fouilles de l'Inst. Fr. d'Arch. Or., Rapports Préliminaires, II, pt. 1)*.

PUBLICATION OF TEXTS.

(a) *From sites in Egypt, etc.*

THEBES. *West Bank*. The fourth volume of the magnificent *Robb de Peyster Tytus Memorial* series of the Metropolitan Museum, New York, is devoted to the Tomb No. 181, known formerly as *Le Tombeau des Graveurs*, in which the colours are particularly well preserved. Mr. DAVIES suggests that the two sculptors Apuki and Nebamun were united in the tomb as having married the same faithful wife Hehnetnofret. DAVIES, *The Tomb of two sculptors at Thebes*.

Mrs. DAVIES and Dr. GARDINER have published *The Tomb of Huy, Viceroy of Nubia in the reign of Tut'ankhamun*, No. 40, a fine monograph with all the scenes and inscriptions that can be collected belonging to this celebrated but now much injured tomb.

BRUYÈRE publishes a selection from nearly two hundred stelae found in clearing the temple of Dér el-Medīnah in 1912; they belonged to the people of the necropolis and record the worship of a great variety of divinities. *Quelques stèles trouvées par M. É. Bruyère à Dér el Médīnah* (*Ann. Serv.*, xxv, 76-96).

East Bank. Karnak. Statue of the high priest Harmakhis found by PILLET, naming (probably as his mother and his sister) two princesses, Tbekenamun and Pa'ankh-amty the wife of Tanutamun, LEFEBVRE, *Le grand prêtre d'Amon Harmakhis et deux reines de la XXVe dynastie* (*ibid.*, 25-33); short version of the marriage of Ramesses II with a Hittite princess, also found by PILLET, *id.*, *Une version abrégée de la "Stèle du Mariage"* (*ibid.*, 34-45).

ABYDOS. Statue of a general, dating after Psammetichus II, WAINWRIGHT, *Statue of Horus, son of Kharu and Mer-neith-it-s* (*ibid.*, 259-261).

NAG' ED-DĒR. Stelae with debased inscriptions of the period between the Old and the Middle Kingdom, *id.*, *Three stelae from Nag' ed Dér* (*ibid.*, 163-166).

SIWAH. The tomb of a prophet Pa-thout, of a late period with scanty inscriptions from the Book of the Dead, the only inscribed tomb hitherto found in the Oasis, STEINDORFF, *Ein ägyptisches Grab in Siwa*, in *Zeitschr. f. äg. Spr.*, lxi, 94-98.

BEISAN (Bethshan). From a good photograph in the *World* newspaper, MORET publishes the second stela of Seti I found by FISHER. It is dated in year 1, the year of his expedition against Canaan in the reliefs at Karnak. The stela records the capture of three cities, Hamat, where the rebellion centred,

Bethshan itself and Yenoam; another city named Pahira took part in the rebellion, and Rehob seems to have remained faithful. Perhaps in this campaign, perhaps later, Seti I penetrated east of the Jordan into the Hauran and along the Orontes to Kadesh, in both of which places his monuments have been found. *La campagne de Sêti I au nord du Carmel in Rev. de l'Ég. Anc.*, I, 18-30.

(b) *From museums.*

CAIRO. Second fascicule of LACAU, *Stèles du Nouvel Empire*, in the *Catalogue*, containing the inscriptions of 122 stelae.

The third and completing volume of LANGE and SCHÄFER, *Grab- und Denksteine des Mittleren Reichs*, has been supplied by LANGE, containing much needed indexes.

HILDESHEIM. Particulars of a find of sixty-six Ramesside tablets believed to be from Horhêt, dedicated by soldiers and officials to a variety of deities, and no less than fifty-five of them to statues of Ramesses II. The most notable, dedicated by a certain Mosei, is sculptured with remarkable scenes, including one of the distribution of gold collars, etc. as rewards by the king. Some, ready made, had not been taken by the dedicators. They must have come from some place where there was a military colony with a shrine for the king's statue. ROEDER, *Ramesses II als Gott*, in *Zeitschr. f. äg. Spr.*, LXI, 57-67.

BERLIN. ANTHES reviews ROEDER's completion with indexes of the *Ägyptische Inschriften aus den Staatlichen Museen zu Berlin* in *O.L.Z.*, XXIX, 131-132.

Transcript and interpretation of a difficult legal papyrus of Dyn. VI from Elephantine. Sebekhotp produces a deed purporting to be made by Woser and giving his wife, children and estate to Sebekhotp for the benefit of Woser's children in due proportion; one of the sons, Thau, denies that Woser ever made such a deed and apparently claims all. The decision is that if witnesses can be produced to swear to the genuineness of the document, the property, etc. is to remain in the house of Sebekhotp in trust; if not, it shall go to Thau. SETHE, *Ein Prozessurteil aus dem alten Reich*, in *Zeitschr. f. äg. Spr.*, LXI, 67-79.

PARIS. New reading from the original of a papyrus published long ago by MASPERO. PEET, *Two Eighteenth Dynasty Letters, Papyrus Louvre, 3230*, in *Journal*, XII, 70-74.

HAGUE. Small monument of the New Kingdom in the new Scheurleer Museum with a unique dedication to the Seven Hathors, BISSING and BLOK, *Eine Widmung an die sieben Hathoren*, in *Zeitschr. f. äg. Spr.*, LXI, 83-93.

LONDON. WRESZINSKI reviews HALL, *Hieroglyphic Texts from Egyptian Stelae, etc. in the British Museum*, Part VII, in *O.L.Z.*, XXVIII, 843-844.

An excellent edition of the Teaching of Amenophis with translation, commentary and index, LANGE, *Das Weisheitsbuch des Amenemope* (*Kgl. Danske Videnskabskabernes Selskab, Hist.-filol. Meddelelser*, XI, 2).
An oracle papyrus, B.M. 10335, transcript by DAWSON, *Journal*, XI, 247-248; see below p. 299.

(c) *Miscellaneous.*

A fine relief in a private collection in Paris naming Nefert-ibt, possibly a daughter of Snefru, BOREUX, *Un bas-relief au nom d'une princesse royale de la IV^e dynastie*, in *Rev. de l'Ég. Anc.*, I, 5-14.

BORCHARDT rearranges the blocks from Neuserre's Sun-temple regarding the *sed*-festival, finds fragments of *sed*-festival scenes of Amenophis III built into the Karnak temple of Chons (which he states is constructed entirely of blocks from other temples), and points out that the building discovered by FIRTH on the south-east side of the Step Pyramid is remarkably like the representations of the *sed*-festival hall. *Jubiläumsbilder* in *Zeitschr. f. äg. Spr.*, LXI, 30-51.

Texts of the great historical inscription of Amenophis II with glossary, KUENTZ, *Deux stèles d'Amenophis II, Stèles d'Amada et d'Elephantine*.

KUENTZ having noted that blocks in the quay of Elephantine published by DE MORGAN preserved fragments of the text of the marriage of Ramesses II with a Hittite princess, M. LACAU examined the originals, discovering another block from the same, and re-collated both the great stela of Abuimbel and the new stela found by PILLER at Karnak. The result, edited by KUENTZ, is a vastly improved text, nearly complete. Ramesses is now seen to represent the Hittites as in desperate case until the king and his daughter arrived in Egypt and brought about peace and amity. KUENTZ, *La "Stèle du Mariage" de Ramsès II*, in *Ann. Serv.*, XXV, 181-238.

(d) *Hieratic.*

A letter, brief but complete, found in a building in the enclosure of the Step Pyramid, complains of the waste of time in taking men from the quarries at Turah across the river to the Residence to draw their

clothing; it is finely interpreted by GUNN, *A Sixth Dynasty letter from Saggara*, in *Ann. Serv.*, xxv, 242-255.

Replication of a papyrus of accounts of the time of Amenophis III. The *shat* which appears in it was a theoretical unit of value in the Old Kingdom, but at this time was incorrectly and loosely used as a weight or measure for metals of different values, and having lost its peculiar significance soon fell into disuse, valuation being made by the *deben* and *kite* of silver until coined money was introduced. WEILL, *L'unité de valeur Shat et le papyrus de Boulay No. 11*, in *Rev. de l'Ég. Anc.*, I, 45-87.

(e) *Demotic.*

A number of specially interesting ostraca and other short or fragmentary documents are published by SPIEGELBERG, *Demotica*, I (*Sitzb. Bavarian Acad.*, 1925, Abh. 6), preparatory to his promised Dictionary.

(f) *Meroitic.*

Forty ostraca from Faras, six from Buhen (Halfa) and one from Dakkeh, GRIFFITH, *Meroitic Studies*, v (*Journal*, xi, 218-224).

HISTORY.

The first volume has appeared of J. DE MORGAN's posthumous work, *La préhistoire orientale*, with the sub-title, *Généralités*.

Sir Flinders PETRIE claims that early settlements of man datable to about 15000 B.C. with flints of Solutrian type, ivory, and thin hard hand-made pottery have been found at Badâri on the east bank of the Nile and in the Fayyûm, contrasting with the European culture of the same age; at Kan fossilised bones of man and hippopotamus come from the gravels of the "ancient Nile," apparently pre-Chellean. PETRIE, *Early Man in Egypt*, in *Man*, xxv, 129-130. It is explained that beads and a pin or borer of copper were found in the graves of the "Badarian" predynastic Egyptians; the "Badarian" culture is closely related, especially in the pottery, to that of the Nubians; the skulls, according to Dr. DERRY, are essentially the same as those of predynastic Egyptians but with negroid tendencies. BRUNTON, *Early Man in Egypt*, *ibid.*, 168. PETRIE's Solutrian dating for Badarian is criticised by BERRITT, *Archaeological Notes*, *ibid.*, xxvi, 10 and PETRIE replies, *The Badarian Civilisation*, *ibid.*, 64.

Prof. CHRISTIAN has continued his study of the Nakâdah-culture in a chapter on its relation to western Asia and the Aegean, *Die Beziehungen der Nagadakultur in Ägypten zu Vorderasien und zur Ägäis* (*Mitteil. d. Anthropol. Ges. in Wien*, LV). SCHARFF, in reviewing it, rejects his acutely argued and elaborate theory that the Nakâdah civilisation was foreign and followed on the Old Kingdom instead of native and prehistoric as is now generally held, *O.L.Z.*, xxix, 255-262. See also below, p. 301.

FARINA combats the interpretation of the Edfû myth and the ancient festival of 'Smiting the Anu' as concerning a Semitic conquest of Egypt, and brings forward linguistic evidence to prove that the Egyptian language was not subject to Semitic influence in remote times, but that Egyptian and Semitic are of common (and probably African) origin. *Su alcune leggende intorno alle invasioni semitiche nell' Egitto predinastico*, in *Rivista di Antropologia*, xxvii (18 pp.).

MORET, *Le Nil et la civilisation égyptienne*, is a complete history touching every branch of Egyptology, with bibliography and index. Sir Ernest BUDGE has published *The Dwellers on the Nile*, a successor to a little book of the same name written forty years ago, now rewritten and greatly enlarged. T. G. ALLEN reviews WEIGALL, *A History of the Pharaohs*, I, in *Amer. Journ. of Sem. Lang.*, XLII, 213.

A. WEBER has written a long article on cultural and sociological questions, *Kultursociologische Versuche: Das alte Ägypten und Babylonien*, in *Archiv für Sozialwissenschaft und Sozialpolitik*, LV, 1-59.

PETRIE, *Ancient Egyptians*, forming No. 11 in Herbert SPENCER's *Descriptive Sociology*, tabulates and classifies the results of an enormous amount of reading and research. PETRIE continues his classified list of Egyptian titles, *The Rulers in Ancient Egypt*, 1925, 79-88; *The Cultivators and their Land*, *ibid.*, 105-110; *Supplies and Defence*, *ibid.*, 1926, 15-23.

Ed. MEYER has brought up to date his discussion of the chronology of Babylonia from the new material obtained since 1913, and of Egypt in view of Borchardt's work of 1917, wherein a much longer chronology for the dynasties was advocated, a scheme which MEYER rejects. *Die ältere Chronologie Babylonien, Assyrien und Ägyptens*, *Nachtrag zum ersten Bande der Geschichte des Altertums*.

Mrs. BRUNTON has drawn and published a remarkable series of portraits representing fourteen of the most famous *Kings and Queens of Ancient Egypt* and derived from a study of their ancient representations and of their mummies when still extant, with careful consideration of contemporary dress and ornament.

With each portrait is a historical note, by Egyptologists such as Professor BREASTED and Professor PEET. Reviewed in *Ancient Egypt*, 1926, 28, and by DAWSON in *Asiatic Review*, 1926, 338.

For JÉQUIER's views on Shepseskaf see above, p. 290. GAUTHIER in *Ann. Serv.*, XXV, 178-180 seems finally to settle the position of Zedefre^c in Dyn. IV immediately before Khafre^c, from a new tomb of Dyn. V at Giza, *Le Roi Zedefre successeur immédiat de Khoufou-Kheops*.

CHASSINAT, *La Princesse Noubemtekh*, in *Rev. de l'Ég. Anc.*, I, 132, adds two objects bearing the name of this princess of the Middle Kingdom to the one previously known.

Mrs. RANSOM-WILLIAMS publishes *The Cylinder Seal of a King Userker^c*, probably of Dyn. XIII, in the Edwin Smith collection at New York, *Zeitschr. f. äg. Spr.*, LXI, 81-83.

E. M. GUEST writes on *Women's titles in the Middle Kingdom in Ancient Egypt*, 1926, 46-50.

The second edition of STEINDORFF, *Die Blütezeit des Pharaonenreiches*, a history of Dyn. XVIII, is much enlarged from the original work of twenty-five years ago, re-written and with almost entirely new illustrations, many of which are coloured. Reviewed by KEES in *Zeitschr. d. Deutschen Morgenl. Ges.*, V, 215-216.

BLACKMAN, *Luxor and its Temples*, is reviewed by GLANVILLE in *Journal*, XI, 343-344. This work has received the honour of being translated into German by ROEDER under the title *Das hundert-torige Theben* with the substitution of good photographs for the rather characterless illustrations of the original.

CAPART, *Thèbes: La gloire d'un grand passé*, is reviewed by HALL in *Journal*, XII, 138, and by T. G. ALLEN in *Amer. Journ. of Sem. Lang.*, XLII, 139-140.

WOLF reviewing PRIDIE, *Mut-em-wija. Die Mutter Amenhotep's (Amenophis') III*, which tries to prove that she was not the princess of Mitanni wedded by Tuthmosis IV, considers the argument untenable. *O.L.Z.*, XXIX, 34-35.

GRIFFITH, *Stela in honour of Amenophis III and Taya from Tell el-'Amarnah*, in *Journal*, XII, 1-2, publishes a fine stela of the time of Akhenaten, found in the great house of Pnhesi.

Miss MURRAY considers that Ramesses II made his mother and his daughters successively queens, probably on account of hereditary rights. The troubled period of the later kings is too little known for the transmission of inheritance to be followed. *Royal Inheritance in the XIXth Dynasty in Ancient Egypt*, 1925, 100-104.

In the *Cambridge Ancient History*, vols. III and IV have been published representing Egypt from Dyn. XXI to XXVII, the period of the Assyrian, Babylonian and Persian Empires.

SPIEGELBERG has written a valuable little book on the credibility of Herodotus' account of Egypt. *Die Glaubwürdigkeit von Herodots Bericht über Ägypten im Lichte der ägyptischen Denkmäler*.

MONTET considers that the harvest depicted in the magnificent tomb of Petosiris, taking place in the *akhit* season, would date the tomb to 500-460 B.C., i.e. in the reign of Darius or Xerxes, and that some features in the scenes can be interpreted as Persian. *Note sur le tombeau de Petosiris in Rev. Archéologique*, V^e sér., XXIII, 161-181.

EHRENBERG, *Alexander und Ägypten (Beihefte z. Alten Orient)*, shows Egypt's place in Alexander's scheme of empire and his doings there; his visit to Egypt was the turning point in his political outlook, towards the government of the world by a Greek.

SPIEGELBERG retranslates and comments on the trilingual decree in honour of Ptolemy IV after the battle of Raphia, making several improvements on SOTTAS' version of the demotic, the best preserved text. *Beiträge zur Erklärung des neuen dreisprachigen Priesterdekretes zu Ehren des Ptolemaios Philopator (Sitzb. Bayer. Akad., 1925, 4. Abh.)*, with a supplementary note on the group *nh* in demotic.

The articles *Skemtiophris* and *Smendes* in PAULY-WISSOWA, *Encyclopædie*, are by KEES.

GEOGRAPHY.

Two of the six projected volumes have appeared of a very important and extensive undertaking by GAUTHIER, a dictionary of geographical names found in Egyptian texts, including those of places abroad. *Dictionnaire des noms géographiques*. When it is remembered that BAVASCH's *Dictionnaire Géographique* with its *Supplément* was published forty-five years ago, and did not contain the foreign names, the utility is obvious of this courageous and well-planned compilation with its numerous references. The two volumes, which are of handy size, reach to the letter *f*.

G. W. MURRAY contributes an important paper on *The Roman Roads and Stations in the Eastern Desert of Egypt* in *Journal*, XI, 138-150; in part they coincided with ancient Egyptian roads, but were mostly

now, to quarries and to ports on the Red Sea:—an interesting illustrated study by a member of the Desert Survey of the Egyptian Government, correcting some identifications and adding new ones.

ALT identifies Ishkhopri, the scene of Esarhaddon's defeat of Tirhaka, with Wes(er)khepru, the city of Sethos II; it is possibly identical with Raumes which may perhaps be sought at Fakhā. *Ishupri*, *O.L.Z.*, XXVIII, 573-578.

GRIFFITH writes on *Pakharas-Bakharas-Faras* in *Geography and History* in the Merotic and Christian periods of Lower Nubia, substituting Bakharas for Bagrāsh, the reading of the older Arabic name hitherto current, *Journal*, XI, 259-268.

Articles on Egyptian geographical names, *Latopolis* to *Lotopolis* and *Sile* to *Smuragdus mons* in PAULY-WISSOWA, *Encyclopaedia*, are by KEES.

FOREIGN RELATIONS.

The publication of the second part of WRESZINSKI's *Atlas zur altägyptischen Kulturgeschichte* has been continued by the issue of the seventh livraison of twelve large photographic plates with explanations.

Sir ARTHUR EVANS has contributed an important paper on *The Early Nilotic, Libyan and Egyptian relations with Minoan Crete* (from prehistoric times to the Old Kingdom) to the *Journal of the R. Anthropol. Institute*, LV, 199-228. *The Early Colonists of the Mediterranean* by RENDEL HARRIS in *Bulletin of the John Rylands Library, Manchester*, X, 330-361, is a curious speculation, seeking early Arabian colonies in Egypt and elsewhere through place-names. KEETSCHMER reviews KÖSTER, *Schifffahrt und Handelsverkehr des östlichen Mittelmeeres im 3. und 2. Jahrtausend v. Chr.* in *O.L.Z.*, XXIX, 331-332, and BILABEL reviews WEBER, *Die Staatenwelt des Mittelmeeres in der Frühzeit des Griechentums*, *ibid.*, 332-334.

The figure of a monster composed of two foreparts united is found in Egypt, throughout the Near East and in China, MÜLLER, *Wanderungen eines altorientalischen Motives*, in *O.L.Z.*, XXVIII, 785-790.

WIEDEMANN describes an Egyptian glazed plaque with Eye of Horus, remarkable as having been found at Bonn, *Ein ägyptisches Amulett aus Bonn* in *Bonner Jahrbücher*, 130, 193-199.

Asia.

Dr. MASTERMAN's address to the Palestine Exploration Fund, on the archaeological sites visited by the recent International Congress in Syria and Palestine, contains some interesting remarks on the Egyptian monuments. A cartouche of Sheshonq has been found by FISHER on a stone slab at Megiddo; and the four Egyptian tablets of Ramesses II on the Nahr el-Kelb, originally protected by folding doors, appear to have been dedicated to Amūn, Rē, Ptah and Seth respectively, like the four divisions of the army, *P.E.F. Qu. St.*, 1926, 117-135.

JIRKU has written a little book on the struggles of Babylonians, Egyptians, Hittites, Israelites, Assyrians, etc. *Der Kampf um Syrien-Palästina im Orientalischen Altertum* (*Der Alte Orient*, xxv, 4).

FRANKFORT has contributed an important paper to the *Journal*, XII, 80-99, attempting to combine archaeological with literary evidence to throw light on the darkness of *Egypt and Syria in the First Intermediate Period*. The deserts of the Sinai peninsula and the poverty of Palestine shut in Egypt on the north-east; Egypt had no intercourse with those countries except for protecting its own frontier and for mining expeditions to Sinai until pressure from behind drove the Semites upon Egypt about Dyn. VI (the campaigns of Una were to punish or repel these encroachments). On the other hand, the Egyptians made expeditions by sea to Byblos to obtain wood, and although they made no permanent settlement there, they built a temple to the local goddess, giving to her the name of their own goddess Hathor. The foreign pressure continuing, these expeditions ceased at the beginning of the reign of Pepi II (it was probably then that the Egyptian temple at Byblos was burned and destroyed). The pressure probably originated in Northern Syria or in Cappadocia and brought with it the art of the button seals, and the growing weakness of Egypt resulted in this foreign element getting the upper hand with Dyn. VIII.

SETHR reviews all the work done on the "Sinai inscriptions," considering that they are in the alphabet which gave birth to the Phoenician and that the Sinai alphabet was invented by the Hyksos in Egypt. The attempted decipherments of GRIMME and the supposed discovery of the name of Moses or of Manasseh are without any sort of reasonable foundation. *Die wissenschaftliche Bedeutung der Patriarchalen Sinaitafeln und die angeblichen Mosezeugnisse* in *Zeitschr. d. Deut. Morgenl. Ges.*, N.R., v, 24-54. GRIMME replies *Hjatiēptu und die Sinaitafelidentikaler*, *ibid.*, 137-150, with *Nachwort* by SETHR, *ibid.*, 151-153. FISCHER reviews GRIMME, *Altägyptische Inschriften vom Sinai*, in *Ancient Egypt*, 1925, 88-90, with note by F[inders] P[etrie] on the signs visible and those required by GRIMME's reading, in a test case.

DUSSAUD in *Syria*, VI, 373-5 reviews GAUTHIER, *Dictionnaire des noms géographiques*, I, with suggestions for identification of names in Syria. In an article *Samarie au temps d'Achab*, 5, *Les renseignements géographiques*, *ibid.*, VII, 9-23, the same scholar discusses FISHER's stela of Sethos I from Beisan, pointing out that there are two place-names Yanoah in the Old Testament, and that Yenoam on the stela is the southern one.

BYBLOS. MONTET describes the antiquities from the tombs contemporary with Dyn. XII. They contained objects of Egyptian manufacture, others imitating Egyptian work, and others again of Syrian design. Among the last are Syrian scimitars and one of these from Tomb II of the time of Amenemmes IV is inscribed "the governor Yephthanub son of Ibishemu" in hieroglyphs. The father's name can now be recognised in a cartouche with ill-engraved hieroglyphs on a shell-shaped pendant from Tomb No. I which is of the time of Amenemmes III. *L'art phénicien au XVIII^e siècle avant J.-C., d'après les récentes trouvailles de Byblos* in *Mouvements et mémoires de l'Acad. d. Inscr. (Piot)*, XXVII, 1-29; reviewed by DUSSAUD in *Syria*, VI, 199-200. Note of the fourth season's work, abbreviated from MONTET's report in *Comptes rendus*, 1924, *ibid.*, 201-202. In 1881 WIEDEMANN copied at Naples the cartouche of Osorkon I on a fragment of a statue which has now been purchased by the Louvre. The fragment is of stone of Gebel Ahmar near Cairo, a material already found inscribed with the cartouche of Osorkon at Byblos by MONTET, and it has three lines of Phoenician writing round the cartouche on the chest, a dedication by Elibaal king of Byblos to the goddess of the city. DUSSAUD, who publishes it, considers it to represent the dedication by the king of Byblos of a statue of his suzerain, the Pharaoh of Egypt, and points out the important historical conclusions to be drawn for the history of Dyn. XXII and for Biblical history. He also gives a revised translation of the inscription of Ahiiram, DUSSAUD, *Dédicace d'une statue d'Osorkon I par Eliba'al, roi de Byblos*, *ibid.*, 101-117. BAUER comments on this and the other inscriptions of Byblos, *Eine neue Inschrift aus Byblos* in *O.L.Z.*, XXIX, 164-166. GIMON offers new readings of the inscriptions of Ahiiram and suggests that Ahiiram was never king, but that his son had been made king by Pharaoh, and that Pharaoh continued to exercise the right of choosing the king of Byblos even in Dyn. XXII, *Note sur les inscriptions d'Ahiiram* in *Bull. Inst. Arch. Fr.*, XXVI, 1-12.

BEISAN.

The American Excavations at Beisan are briefly described by S. A. COOK in *P.E.F., Qu. St.*, 1926, 29-30. Four temples have been found, two of Ramesses II, one of Seti I and one of Amenophis III or IV, all dedicated to Astarte, *ibid.*, 91.

HITTITES, ETC.

On the peoples of Asia Minor and the first appearance of the Indo-Germanic people in history, with several references to Egyptological discovery, Ed. MEYER, *Die Völkertämme Kleinasien, das erste Auftreten der Indogermanen in der Geschichte und die Probleme ihrer Ausbreitung*, in *Sitzb. of the Berlin Academy*, 1925, 244-260.

Kizzuwadna is to be placed in Cilicia in agreement with Sidney SMITH's view and not on the Black Sea in accordance with common opinion, SAYCE, *The Site of Kizzuwadna*, in *Liverpool Annals*, XII, 173-174 and GÖTTE, who quotes new evidence that it was on the gulf of Issos, *Die Lage von Kizzuwadna* in *Zeitschr. f. Assyriologie*, XXXVI, 305-308.

BIBLICAL, ETC.

Chapters by HALL, *Israel and the surrounding nations*, and by S. A. COOK, *The religious environment of Israel*, are contained in PEAKE, *The People and the Book, essays on the Old Testament*.

BLACKMAN contributes a chapter on *The Psalms in the Light of Egyptian research* (with a note on pp. xiii-xiv) to SIMPSON, *The Psalmists*, insisting on the influence of Semitic peoples on Egyptian thought. GRESSMANN points out various sources utilised, either silently or avowedly, in the Biblical proverbial literature and discusses the means of intercommunication of ideas and literature among the nations, Egypt taking the lead in civilised life. *Israels Sprechweise im Zusammenhang der Weltliteratur*.

JACK, *The Date of the Exodus*, is a well-informed book, showing how the Exodus can be placed about 1450 B.C., the occupation of the mountainous parts of Palestine by the Khabiri (Hebrews) not interfering with the expeditions of the Ramesside Pharaohs along the coast road. WIESEN argues that "So (Sove) appointed for Egypt by Piankhi; the defeat of Raphia would put an end to Piankhi's power in Egypt, necessitating Shabako's reconquest. *The relations of Egypt to Israel and Judah in the age of Isaiah* in *Ancient Egypt*, 1926, 51-53. FELLERTON, *Isaiah's attitude in the Sennacherib Campaign*, in *Amer. Journ. of Sem. Lang.*, XLII, 1-23, discusses the part played by Egypt and Ethiopia.

Philological discussion of the equation Khabiri=Hebrews, OPTZ, *Zur Habiru-frage*, in *Zeitschr. f. Assyriologie*, XXXVII, 99-103; NAVILLE, *The Egyptian Name of Joseph*, making it a title, "the head of the sacred college," in *Journal*, XII, 16-18.

VARIOUS.

HALL, *A jasper group of a lion and bull fighting, from el-Amarnah, in the British Museum*, in *Journal*, XI, 159-161, a fine object formerly attributed to Crete by Dr. HALL but now rather to Syria. The fragmentary cuneiform tablet found by PEET at Tell el-Amarnah is bilingual, showing Egyptian and Babylonian numerals from 3-10 and other more doubtful words, SIDNEY SMITH and GAUD, *A cuneiform vocabulary of Egyptian words with Additional note by PEET in Journal*, XI, 230-240. MERCER, *Studies in the Tell el-Amarna letters*, in *J. Soc. Or. Res.*, IX, 241-248, lands and peoples, Sutu, Alashia, Qatna, Gubla (Byblos), Sa-Gaz.

BULL describes *Two letters to Akhnaton, King of Egypt* found at Tell el-Amarnah (=KNUDTON 15 and 153) and recently acquired by the Museum, *Bull. Metr. Mus. of Art*, XXI, 169-176.

BAUER suggests that when UNAMUN was with the prince of Byblos, "the shadow of his fan" was punningly taken as "the shadow of Pharaoh," *Ein phönikischer Wortwitz im Reisebericht des Un-Amun?* in *O.L.Z.*, XXVIII, 571-572.

KUNZT in preparing an edition of the poem describing Ramesses II's feats at the Battle of Kadesh has found four new texts and collated the old ones. The "Valley of the 'ash" or 'spruce fir' in the Story of the Two Brothers, is mentioned in it as on the way to Kadesh, *Une nouvelle édition du "Poème de Pentaour"* in *Comptes Rendus*, 1925, 242-246; DUSSAUD, *ibid.*, 246, would identify it with the valley of the Eleutheros.

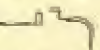
EISLER supports the equation *Penkhu*=Phoenicians. The name is not found in the Semitic language but may have had a Semitic origin "the settled folk"; in Egyptian it might mean "the carpenters," *Ägyptisch Penkhu, Griechisch Φαινίκαι* in *Zeitschr. d. Deut. Morgenl. Ges.*, N.F., V, 154-160.


A doubtful word in SPIEGELBERG's *Hieratic Papyrus and Ostraca* may be a Hebrew word for "razor," BUNDI, *Mt/prt*, in *O.L.Z.*, XXVIII, 572. *Zahi* (=Palestine) means "dry land," and *hert*="wild bear" in Semitic, EISLER, *Ägyptisch dphj=arisch sabja. Ägyptisch hprt und kananisch hazir*="Wildschwein," in *O.L.Z.*, XXIX, 2-4. 'gn, 'agyn "ring-stand," jar stand=Heb. 'gyl, KEIMER, *A Semitic loan-word in Egyptian*, in *Amer. Journ. Sem. Lang.*, XLII, 205-208.

Africa.

HUNTINGFORD suggests parallels with Egyptian customs, etc., in Kenya and Uganda, *Egypt in Africa*, in *Ancient Egypt*, 1925, 98-99, and writes *On the connection between Egypt and the Mami-Nandi group of East Africa*, *ibid.*, 1926, 10-11.

PHILOLOGY.

Of the great Berlin dictionary, the preparation of which began nearly thirty years ago, the first part has now been published, ERMAN und GRAPOW, *Wörterbuch der ägyptischen Sprache: Erste Lieferung*. It takes the form of (1) a vocabulary much like the small manual dictionary (*Handwörterbuch*) of the same editors, showing the various meanings and spellings of each word and the periods to which it and they belong (this part is in autograph to save the enormous cost of variable hieroglyphic type), and (2) printed references to published or original texts (to be followed when complete by a German index of meanings). The vocabulary as yet reaches 240 pages covering the first three letters of the alphabet down to  :

the number of words treated is of course vastly greater than in BRUGSCH's marvellous *Wörterbuch* written between forty and sixty years ago, although demotic is not included. The references reach only to  :

in sixteen pages of print, and at present many of them are difficult to utilise owing to the imperfections of published copies; but the promised supplements will eventually give the correct readings of key passages. Meanwhile we are very grateful to ERMAN, the initiator of the undertaking, and to his assistant editor, as well as to all the scholars of different nationalities who have taken part in its preparation, for this first instalment of the final work. SPIEGELBERG has written a warm greeting *Zu der ersten Lieferung des Wörterbuches der ägyptischen Sprache* in *O.L.Z.*, XXIX, 233-236.

MONTET reviews a number of philological and other works including ERMAN und GRAPOW, *Ägyptisches Handwörterbuch*; LAMBERT, *Lexique hiéroglyphique* (an unsatisfactory compilation); SPELERS, *Les textes des pyramides égyptiennes*, II, vocabulaire; GUNN, *Studies in Egyptian Syntax*. His review is entitled *Chronique égyptologique*, in *Revue des études anciennes*, XXVIII, 50-68.

Krs "skip" of kids, a word borrowed from Semitic (Assyrian, Arabic, Hebrew), *ḥḥ* a fish-jewel for the hair in *Pap. Westcar*, *ḥḥ-wet* priests of Herculopolis in the *Admonitions*, BLACKMAN, *Philological Notes*, in *Journal*, XI, 210-215. *Bnš* lintel, *ḥḥ* cross-bars holding the vertical planks of the door, DRIOTON, *Le "fronton" et les "tasseaux" de la porte*, in *Bull. de l'Inst. franç.*, XXVI, 14-19. *Mḥ* not "weaving," connexion between 'rf and 'f, *šn* white lily as well as lotus, the plant *ḥḥ* hardly "rush," the supposed "brown bear," *ḥḥ-ty* "the two reed huts," BISSING, *Zur ägyptischen Wortkunde*, in *O.L.Z.*, XXIX, 305-309.

A new and enlarged edition has appeared of ROEDER's useful little grammar, *Ägyptisch*, containing grammar, exercises and glossary; reviewed by SPIEGELBERG in *O.L.Z.*, XXIX, 561-565.

GUNN, *Studies in Egyptian Syntax*, is reviewed by ERMAN in *O.L.Z.*, XXIX, 178-181, and with much detail by BLACKMAN in *Journal*, XI, 347-350.

Fresh examples of the rare negative enclitic *w*, one with the determinate of negation, SETHE, *Zu der enklitischen Negation w* in *Zeitschr. f. äg. Spr.*, LXI, 79-81.

SPIEGELBERG, *Demotische Grammatik*, reviewed by GRIFFITH, *O.L.Z.*, XXVIII, 642-644.

SETHE has written an elaborate and instructive article showing that in syntax and vocabulary Demotic is sister to Coptic rather than mother, both being derived from New Egyptian. He notes the leading characteristics of each of the known phases of literary Egyptian, and marks the point at which it branches from the main stream of the spoken language. *Das Verhältnis zwischen Demotisch und Koptisch und seine Lehren für die Geschichte der ägyptischen Sprache* in *Zeitschr. d. Deut. Morgenl. Ges.*, N.K., IV, 290-316. The same scholar points out the remarkable and hitherto unrecognised fact that the initial *ḥ* and *k* of Egyptian were never (or hardly ever) marked by *spiritus asper* in Greek (and seldom by *k* in "Bohairic") though often written in Latin. *Zur Wiedergabe des ägyptischen h am Wortanfang durch die Griechen* in *Nachrichten Göttingen*, 1925, 50-56.

SETHE, *Ägyptische Lesestücke, Texte des Mittleren Reiches*, is reviewed by LANGE in *O.L.Z.*, XXVIII, 844-845.

The reading of the demotic-group for "wizard," *ḥḥ-tp*; *a pe-w gy* = "all"; *dy a* = "smite"; demotic of *āḥḥs*; *ḥy-wr* = "Nile," SPIEGELBERG, *Demotica*, I (Sitzb. of Bavarian Academy, 1926, Abh. 6).

HESTERMANN finds that in Meroitic *py* when followed by a vowel produced *ps*, *Ein Lautgesetz in den meroitischen Inschriften* in HENSCHKE and MÜLLER, *Folia ethnologica*, I, 11-13.

PALAEOGRAPHY.

JENSEN, *Geschichte der Schrift*, is reviewed by HERMANN in *O.L.Z.*, XXVIII, 802-805.

Dr. GARDINER has had a new fount of hieroglyphic type made by Messrs. BANNERMAN of London for his forthcoming Egyptian grammar. It is founded upon the inscriptions of Dyn. XVIII, since they belong to the stage of the language treated in the Grammar, are comparatively accessible at Thebes and are rich in uncorrupted characters for the models. The signs were collected and copied by Mr. and Mrs. DAVIES. The labour involved has been very great but the fount is already rich, consisting of 750 separate signs, many of them in three sizes, and these little pictures are an archaeological study in themselves; the use of them will leave no excuse for inaccurate ideas and loose transcriptions of hieroglyphic and hieratic texts. The present list, *The Synopsis of Dr. Alan H. Gardiner's New Fount of Hieroglyphs* (Oxford University Press), is arranged for the convenience of the printer, following that of LEPSIUS with all its old faults of identification. A catalogue of signs in correct natural order will doubtless be one of the features of the new grammar.

PATON, *Animals of Ancient Egypt*, is reviewed in *Ancient Egypt*, 1925, 111, by WRESZINSKI in *O.L.Z.*, XXIX, 343-344, and by T. G. ALLEN in *Amer. Journ. of Sem. Lang.*, XLII, 142-143.

DOMHAET writes on *Die Bedeutung des Determinatives (...)*, the determinative of the word *rd-wr* in the Pyramid Texts, perhaps the "dog-leg" approach to the pyramid, *Journ. Soc. Orient. Res.*, IX, 233-240.

SPIEGELBERG reviews DÉVAUD, *L'âge des papyrus égyptiens hiéroglyphiques*, in *O.L.Z.*, XXVIII, 845-846.

RELIGION.

HOFFNER has now completed his *Fontes Historiae Religionis Aegyptiacae* by a fifth part, ending with an admirable index to this exhaustive collection of Greek and Latin texts. Reviewed by WIEDEMANN in *O.L.Z.*, XXIX, 36-37.

F. W. READ has written a little book on *Egyptian Religion and Ethics*, reviewed by WIEDEMANN in *O.L.Z.*, XXIX, 565-566. SCHARFF reviews PETRIE, *Religious Life in Ancient Egypt*, in *op. cit.*, XXVIII, 637-640 and the new edition of MORET, *Mystères égyptiens*, *ibid.*, 841-2.

VAN DER LEEW writes on the myth and form of Osiris (in reference to RUSCH's article, *Ein Osirisritual* in *Zeitschr. f. äg. Spr.*, LX), *Zum Mythos und zur Gestalt des Osiris* in *Archiv für Orientforschung*, III, 9-11.

HORNLOWER publishes wooden phallus found on the floor of the shrine at Dér el-Bahî in NAVILLE's excavations, *Phallic offerings to Hathor* in *Man*, XXVI, 81-83.

NAVILLE, *La plante magique de Noferatum*, upholds his interpretation as against KEES, *Revue de l'Ég. anc.*, I, 31-44.

SPIEGELBERG explains the name Panepi in an early Greek dedication to the Apis bull as meaning "the Ox of Apis," *The God Panepi* in *Journal*, XII, 34-37.

DAWSON writes on *Amenophis, the son of Hapu*, honoured and eventually deified, as an exception to the Egyptians' general neglect of their forefathers, with a good collection of material and list of his known statues, *Aegyptus*, VII, 113-138.

In ROSCHER's *Lexikon* articles have appeared by ROEDER on *Wep-wawet* (Wolf-god), of three columns, and *Wind*, of four columns.

MERCER writes an interesting study of *The Religion of Ikhnaton* in *Journ. Soc. Or. Res.*, X, 14-33, and on *Statuettes of Egyptian gods*, with illustrations, in *Bulletin of the R. Ontario Museum*, 1926, 9-13.

PETRIE would interpret the so-called sacrificial dance as a rain-making ceremony, *The Royal Magician in Ancient Egypt*, 1925, 65-70.

BLACKMAN translates a papyrus in the British Museum of Dyn. XX transcribed by Dawson, recording a trial at Thebes and the decision of the god Amūn, as the first of a series of articles on Egyptian oracles, *Oracles in Ancient Egypt*, I, in *Journal*, XI, 249-255.

An important monograph by KEES on the origins and development of ideas regarding life after death down to the end of the Middle Kingdom, *Totengeraben und Jenseitsvorstellungen der alten Ägypter*, points out that the great time of their growth (for the general population apart from the king) is that which lies between the Old Kingdom and the Middle Kingdom; this period is well illustrated by the "Coffin Texts," but is without surviving pictorial representation and at present deficient in archaeological illustration owing to the heedless plundering of the necropolis of Asyūt.

PERRY writes on *The Cult of the Sun and the Cult of the Dead in Egypt* in *Journal*, XI, 191-200, against PERT's strictures on his facts and theories and against BLACKMAN's view that early Heliopolitan Sun-worship was usurped later by Osiris worship; answered by BLACKMAN, *Osiris or the Sun-god? A reply to Mr. Perry*, *ibid.*, 201-209.

The ancient wakening cry to the god, "wake in peace!" is traceable in Serapis worship as described by PORPHYRY in the third century A.D. SPIEGELBERG, *Der Weckruf an die ägyptischen Götter*, in *Archiv f. Religionswissenschaft*, 1926, 348.

Study of the various birds connected with the soul and the dead; a new claimant, the "Hammer-head" *Scopus*, is put forward as the prototype of the remarkable *th*-bird. KLEBS, *Der ägyptische Seelenvogel*, in *Zeitschr. f. äg. Spr.*, LXI, 104-108. SPIEGELBERG argues that the human-headed hawk with divine beard was originally an emblem of the dead or dying king, the idea descending afterwards to nobles and then to the people generally. The head and shoulders of a royal statue of Dyn. IV are human in front and hawk at back. *Der Ursprung des ägyptischen Seelenvogels* in *O.L.Z.*, XXIX, 393-395. K. LANG, *Ka, Seele und Leib bei den alten Ägyptern*, is reviewed unfavourably by KEES, *ibid.*, 405-406.

ORBINK studies the magical conception of the name in Ancient Egypt (*De magische beteekenis van den Naam inzonderheid in het Oude Egypte*) under three headings, the name as part of the body, the name in use as a spoken word, the name as a means of obtaining power.

An article on *Les statues vivantes* contributed by MME. WEYNANTS-RONDAY to the review *Le Flambeau* for 1925 gives the résumé of her monograph which is soon to appear on the supposed vivification of statues in Egypt and elsewhere.

PETRIE puts forward a suggestion that the Book of the Dead represents the popular traditional mythology as opposed to the royal mythology of the Pyramid Texts, and that the localities named in it point to prehistoric immigration of the Egyptians from the Caucasus, *The Origins of the Book of the Dead in Ancient Egypt*, 1926, 41-43.

SCIENCE.

ELLIOT SMITH and DAWSON, *Egyptian Mummies*, is reviewed by BLACKMAN in *Antiquaries Journal*, V, 446-448. DAWSON writes on *Medicine and Surgery in Ancient Egypt* in *Asiatic Review*, Jan. 1926, 165-176; *Bats as Materia Medica* in *Annals and Magazine of Natural History*, August 1925, 221-227; *The Mandrake*

in *Ancient and Mediæval History in American Druggist*, Aug. 1925; *Mummy as a Drug*, *ibid.*, Nov.; *Studies in Ancient Materia Medica*, I The Pomegranate, *ibid.*, Dec.; II The Onion, Jan. 1926; III The Mouse, Feb.; IV Hartshorn, March; V The Swallow, April; VI Castor Oil, May; VII Cummin, June; VIII The Bat, July; IX Tortoiseshell, Aug. A valuable series of notes.

A small book by RANKE, *Altägyptische Tierbilder*, is reviewed by BONNET in *O.L.Z.*, XXIX, 343. DAWSON writes on *The Mouse in Fable and Folklore in Folklore*, XXXVI, 227-248; *The Earliest records of the Elephant in Annals and Magazine of Natural History*, Dec. 1925; *The Bee-eater (Merops Apiastor) from the earliest times and a further note on the Hoopoe in The Ibis*, July 1925, 590-594.

KEIMER, *Die Gartenpflanzen im alten Ägypten*, 1. Bd., is reviewed by DALMAN in *O.L.Z.*, XXVIII, 641-642. The "carrying of sand from the East to the West" in the *ushebt*-formula refers to manuring of the fields, as was first suggested by SETHE, but probably with the marl called *taft* obtained in the eastern desert, a practice which can be definitely traced back to Roman times, KEIMER, *Das "Sandfahren" der Totengigonen*, in *O.L.Z.*, XXIX, 98-104, cf. SCHÄFER, *ibid.*, 378.

NAVILLE discusses the coins and ingots stamped in hieroglyphic "good gold" and other occurrences of "good gold" in Egyptian inscriptions, together with the names given to gold of various qualities and sources, *L'or bon d'Égypte* in *Comptes Rendus*, 1925, 278-286. BISSING finds silver named in inscriptions of Dyn. III; *zam* was the name of electrum, but in Ptolemaic times, when electrum was no longer used, was applied to gold, *Zur Geschichte des Silbers und Elektorns in Acta Orientalia*, IV, 133-141.

G. F. HILL publishes a remarkable gold coin with design copied from the coinage of Athens but following the Persian standard of weight, inscribed TAO=Zcho, Tachos. *Tachos, King of Egypt in British Museum Quarterly*, I, 24-25.

GUNN subjects PEET's edition of *The Rhind Mathematical Papyrus* to a close scrutiny, revealing several passages in which fine scholarship can make important improvements. This review will be indispensable to possessors of the book, *Journal*, XII, 123-127.

An article by WIELEITNER, *Zur ägyptischen Mathematik*, in *Zeitschr. f. Math. u. Naturw. Unterricht*, LVI, 129-137, I have not seen.

Sir Herbert THOMPSON determines from a demotic papyrus the length of the schoenus in the Thebais at sixty stadia, in agreement with Artemidorus' statement quoted by Strabo. *Length-measures in Ptolemaic Egypt in Journal*, XI, 151-153.

BORCHARDT reviews NILSSON, *Primitive Time-reckoning*, with important remarks on the Egyptian year, in *O.L.Z.*, XXVIII, 618-621 and FRÄNZEL, *Die Cheops-Pyramide und ihre elementare Lösung mit einem elementar-mathematischen Anhang as a curiosity*, *ibid.*, XXIX, 473-474; and with NEUGEBAUER contributes an article, *Beobachtung des Frühaufgangs des Sirius in Ägypten*, to *O.L.Z.*, XXIX, 309-316.

LITERATURE.

LANGÉ has published a collection of Egyptian tales in Danish, *Ägyptiske Aeventyr*, reviewed by KORFED-PETERSEN in *O.L.Z.*, XXIX, 403.

A new translation of the two stories of the Harris Papyrus with elaborate commentary has been produced by BLOK, *De beide volksverhalen van Papyrus Harris 500 verso*, as a doctoral thesis at Leyden, unfortunately without reference to the original papyrus; it has been reviewed by WIEDEMANN in *O.L.Z.*, XXIX, 406-407 and by PEET in *Journal*, XI, 336-341, the latter giving a large number of new readings from a study of the original in the British Museum. PEET also prints separately a greatly improved translation, *The Legend of the capture of Joppa and the Story of the Fated Prince*, *ibid.*, 225-229.

BLACKMAN and PEET combine to give a new translation of an interesting Papyrus in the British Museum after study of the original document, *Papyrus Lansing: A translation with notes in Journal*, XI, 284-298.

ERMAN gives the results of his latest study of the papyri which contain exercises from the writing schools, regretting that in most cases he has not been able to consult the originals, although a new examination would be needed to verify their relations to each other. He discusses the features which distinguish them from others and the nature of their contents, pointing out that the pupils were often of mature age, long used to the cursive writing of business documents, but qualifying themselves as elegant writers in various literary hands, *Die ägyptischen Schülerhandschriften (Abhandlungen of the Berlin Academy*, 1925, No. 2).

STRÖVE considers that the Great Harris Papyrus was not intended for the tomb of Ramesses III but probably was to be read at the accession of Ramesses IV in the palace-temple of Medinet-Habû. He suggests that it was found along with various judicial papyri of Dyn. XX, that it is named with them in

the papyrus list preserved at Vienna, and that besides this complete copy on one enormous roll there existed another copy in which the separate parts were on separate rolls. *Ort der Herkunft und Zweck der Zusammenstellung des Grossen Papyrus Harris*, in *Aegyptus*, VII, 1-40.

LEFEBVRE draws attention to a figure of speech in describing a good servant as "a trusty pilot," referring to a translation already made by GARDINER of a similar passage from the inscriptions of Rakhmarrê, *Addition à Annales XXIV*, 1924, p. 133 in *Ann. Serv.*, XXV, 46. SETHE reviews GRAPOW, *Die bildlichen Ausdrücke des Ägyptischen*, in *Zeitschr. d. Deut. Morgenl. Ges.*, N.B., IV, 317-325.

SETHÉ gives an interesting interpretation of a difficult passage in Amenophis' Teaching, 'Der Mensch denkt, Gott lenkt' bei den alten Ägyptern in *Nachrichten Göttingen*, 1925, 141-147.

SCOTT's *Hermetica* is the subject of an article by NOCK, *A new edition of the Hermetic Writings* in *Journal*, XI, 126-137.

A small fayence tablet, found with the Tell el-'Amarnah tablets, names "the Book of the Sycamore and Olive," perhaps a cuneiform story, perhaps Egyptian, HALL, *An Egyptian royal bookplate; the ex libris of Amenophis and Teie*, in *Journal*, XII, 30-33.

LAW.

PEET, *Fresh Light on the tomb robberies of the Twentieth Dynasty at Thebes*, in *Journal*, XI, 162-164, supplements his previous paper (*ibid.* 37-55) from a further papyrus in the British Museum—it concerns the robbery of a tomb, probably that of Queen Isis (Group IV)—and corrections obtained in remounting another papyrus of the same collection.

In part of a long article, *Zur Doppelausfertigung ägyptischer Urkunden*, IV, BILABEL discusses the examples of duplication in demotic documents and gives a list of ten, ranging from 279 to about 215 B.C. *Aegyptus*, VI, 93-96.

ARCHAEOLOGY.

BISSING has written a small book on the Oriental foundation of the History of Art, *De Oosterse Grondslag der Kunstgeschiedenis*, a sketch with bibliography, and an article on the origin of sculpture, remarking that hunting and herb-gathering sharpened observation of nature, *Zur Theorie der Anfänge der Skulptur, besonders in Ägypten* in *Völkerkunde*, 1926, 113-120.

Die Kunst des Alten Orients by SCHÄFER and ANDRAÉ, illustrating the art of the Near East in photographic and coloured plates, is a wonderful collection of choice pieces in all departments, with historical introduction. Nearly three hundred plates are devoted to Egyptian subjects. Reviewed by CHRISTIAN in *Wiener Zeitschr. f. d. Kunde d. Morgenl.*, XXIII, 221-224, KEIMER in *Aegyptus*, VI, 283-284.

BORREUX has written an essay on *L'art égyptien* with sixty-four plates, illustrating architecture, sculpture and jewellery, and including some unpublished examples in the Louvre.

The well-known book by Sir Ernest BUDGE, *The Mummy, a Handbook of Egyptian funerary Archaeology*, now over thirty-five years old, has reappeared, greatly enlarged and with new illustrations, forming a most comprehensive work. Reviewed by DAWSON in *Asiatic Review*, 1926, 335-338.

According to ELISE BAUMGÄRTEL, the dolmen, abundant and of various ages in North Africa but as yet little investigated, influenced Egyptian grave-forms in the Middle Prehistoric period, when an example with cist chamber is found at Hierakonpolis, the earlier forms in Egypt being pit and stairway graves. Surface burial like that of the dolmen is again seen in the royal tomb of Nakâdah, but the stairway tomb influenced the design of the later royal tombs of Dyn. I. Dolmens have been most recently described from Western North Africa by FEONENIUS (in *Prähistorische Zeitschrift* for 1916); they have not yet been searched for east of the Tripoli boundary, and scientific excavation of them is much needed. *Dolmen und Mastaba* (*Beilage zum Alten Orient*, 6).

SCHAEFF publishes four prehistoric vases with white decoration on red, one having elephants moulded in the round upon the lip. They belong to the early prehistoric age, the known cemeteries of which are confined to a region extending from Kaū to Gebelén. On examining the remains of this period, the bounds remind him of the Libyan hounds of Antef, the phallus-shoath is Libyan, the Seth animal belongs to the Libyan god Ash, certain arrowheads are of types widely spread from Morocco to Nubia and a type of basalt vase has been found in a Libyan grave at Mersa Matrûh; moreover the Libyan land Bekh is probably to be found about El-Kab. He therefore suggests that the people of this Upper Egyptian culture were Libyan-speaking Hamites, *Vorgeschichtliches zur Libyerfrage* in *Zeitschr. f. äg. Spr.*, LXI, 16-30.

WIJNGAARDEN writes on the eagle (and hawk) motif in the Near East, *Het adelaar-motief in de egyptisch-voor-Aziatische cultuurwereld* in *Oudheidkundige Mededeelingen* of the Leyden Museum, N.S., VI,

95-108. G. de V. Kelson has written several papers applying a law of isokephaly to Egyptian relief work, *Bulletin de l'Institut Brésilien des Sciences*, anno 1926, II.

BOREUX has completed his important and elaborate study of Egyptian navigation and shipping, *Études de nautique égyptienne* in *Mémoires* of the Inst. Arch. Français, terminating with full indexes. The first fascicule is reviewed in *Syria*, VI, 281.

WOLF has produced a small but valuable monograph on ancient Egyptian arms and armour, *Die Bewaffnung des altägyptischen Heeres*, with twenty-two plates and numerous drawings to illustrate the weapons and their cases, chariots and their fittings, etc., all discussed historically. He elsewhere publishes a fine and complete battleaxe, and staves with a projecting twig at the handle end and ornamented with bark which may have been used as weapons, apparently the *ḥwt*-sticks. *Über einige Waffen im Berliner ägyptischen Museum* in *Zeitschr. f. äg. Spr.*, LXI, 98-104.

WRZESINSKI, from representations of bakers in the tombs, gives an example of each operation of baking, ten in all, and collects the legends attached from all periods, *Bäckerei* in *Zeitschr. f. äg. Spr.*, LXI, 1-15.

The Museum of Antiquities at Leyden has been moved into a more commodious building, formerly the Science Museum. The sculptures and larger monuments from Egypt have been rearranged by Mr. HOLWERDA in a most effective manner with wonderful and ingenious arrangements for lighting the reliefs, and a new guide has been printed, *Egyptische Kunst en Beschaving in 's Rijks Museum van Oudheden—Gids voor de Egyptische Afdeling*.

At Boston the *New Installation of Egyptian Sculpture* in the "Old Kingdom Room I" is described in the *Bulletin of the Museum of Fine Arts*, XXIII, 72.

Dr. GORDON has completed the arrangement of the Egyptian collection at Philadelphia. The new wing was opened in May last and is described in *The Eckley Brinton Cox Junior Egyptian Wing* with illustrations in *The Museum Journal*, XVII, 101-127.

In the Cairo Catalogue there have appeared:—

The third fascicule of VERNIER's *Bijoux et orfèvreries*, describing over five hundred pieces.

The second part of BORCHARDT, *Statuen und Statuetten*.

A volume of Indexes to the first three volumes of LEGRAIN, *Statues et statuettes de rois et de particuliers*, by GAUTHIER.

PETRIE's *Buttons and Design Scarabs, illustrated by the Egyptian Collection in University College, London*, represents a very large collection ingeniously arranged and published. It includes many scarabs with intelligible inscriptions of good wishes, etc., and a supplement to the parallel *Scarabs and Cylinders with Names*. The buttons begin in Dyn. VI and are a sign of the foreigner, disappearing with the rise of the Heracleopolite Dyn. IX.

WIJNGAARDEN publishes a very primitive lion of nummulitic limestone, acquired for Leyden a century ago, *Een monument uit der oudsten tijd der Egyptische beschaving in Oudheidkundige Mededeelingen* of the Leyden Museum, N.S., VI, 30-32.

BISSING, *Two doodenfiguren van de 6de dynastie*, in *Bull. v. d. Vereniging tot bevordering der kennis v. d. antieke Beschaving*, figures of a man in wood, of a woman in ivory, from Mên, early Dyn. VI.

BORCHARDT's suggestion of thirty years ago, that the narrow colonnade of Amenophis III at Luxor was intended as the beginning of a great hypostyle hall, has become the prevailing opinion. A colonnade in this position is however a usual feature in the large temples of Amenophis III; the essential idea of a great Egyptian temple is a passage for festal processions leading to the shrine, SCHÄFER, *Die angebliche Basilikenhalle des Tempels von Luksor*, in *Zeitschr. f. äg. Spr.*, LXI, 52-57; compare Engelbach in the Bibliography in *Journal*, XI, 317.

A limestone slab, covered on both faces with fine Memphite sculpture of the end of Dyn. XVIII for the king's craftsman Amenemant. BISSING, *Über eine Grabwand aus Memphis in der Glyptothek König Ludwig's*, in *Münchener Jahrbuch d. bildenden Kunst*, N.F., I, 207-224.

A guide to the 'Amarna collection at Berlin, *Führer durch die Neuaufstellung der Funde aus El-Amarna im Berliner Museum* is enlarged from SCHÄFER's paper contributed to the *Mitteilungen der D.O.G.*, No. 63, with additional illustrations. In No. 64 of the same, 64-61, SCHÄFER publishes photographs of two colossal statues of Amenophis IV found by PILLET at Karnak. They bear the name Amenhotp and must date from the second half of year 5. They represent a sudden turning to ugliness from the prettiness of Amenophis III, a revolution which is comparable to that now felt in European art and to the phase of Expressionism.

BÉNÉDITE, *À propos d'une petite tête royale en pâte de verre*, figuring a fine head in the Louvre of the end of Dyn. XVIII, *Rev. de l'Ég. Anc.*, I, 1-4 and another in green mother-of-emerald recently purchased, *Sur une tête de princesse de la famille d'Akhounateu* (*Mém. Piot*, xxvii).

A lecture by SPIEGELBERG on the purely Egyptian hunting scenes upon the casket of Tutankhamūn is printed (without illustrations) in the *Münchener Jahrb. d. bildenden Kunst*, N.F., III, 126-128, cf. below, p. 304.

Coffin from MAUNIER's find of 1856 (?) at Dêr el-Bahrî, WIEDEMANN, *Ein ägyptischer Sarg der Saitenzeit im Akademischen Kunstmuseum zu Bonn in Bonner Jahrbücher*, 130, 147-179, with full commentary.

In the *Bulletin of the Cleveland Museum of Art*, XII, 147-149, there is an article on *Old Kingdom Reliefs in the Egyptian Gallery*. [The example figured is a remarkable imitation of old sculpture, dating however from Dyn. XXV or XXVI b.]

SELIGMAN figures lunate pigmy flints from REISSNER's graves at Kurrû near Napata, with similar implements of obsidian from Kenya, and quotes carnelian microliths from Jebel Gûle between the White and Blue Niles, *Pygmy Implements from North-East Africa in Man*, xxvi, 132-133.

CROWFOOT and BENTLEY describe old and modern Nuba pots, many resembling the ancient C-group and Meroitic black ware, with notes on their manufacture, etc. The peculiar pottery found by GARSTANG in graves at Meroe does not occur in REISSNER's Meroitic finds and must be post-Meroitic; similar ware ranges from Berber in the north to Wad el-Haddâd on the Blue Nile in the south and the name Alou ('Alwa) ware is suggested for it. *Nuba Pots in the Gordon College in Sudan Notes and Records*, VII, 18-28.

Sales including Egyptian antiquities were held by Messrs. Sotheby and Wilkinson on 14-15 Dec., 1925; 22 March, 1926; 8-10 June (Lord Carmichael); 21 June (Bateman); 22-23 July (Mrs. Garstang).

In various journals the following articles on archaeological subjects occur:—

Ancient Egypt, 1925, 71-73, FLITNER, *An unpublished wooden statuette*, of Dyn. XVIII, in the Hermitage. 74-77, STRUVE, *A stamp of King Amenhotep III*, large, duck-shaped, of wood for sealing doors (?). 77-78, id., *A wood-stamp of the Hermitage Collection*, small, for the lion's house (?). 91, review of BOREUX, *Études de nautique égyptienne*, I. 93, review of C. R. WILLIAMS, *Gold and Silver Jewelry and related objects*. 94, review of NAVILLE, *L'âge de cuivre en Égypte*. 112, review of SCHÄFER und ANDRAE, *Die Kunst des alten Orient*. 112-113, review of MONTET, *Les scènes de la vie privée*. 114-115, review by YERVIN of FLITNER, *The pottery and glazewares of Tell Amarna* (Russian, in *Annual of the Russian Institute of the History of Arts*, I, 137-164). 1926, 12-14, *The Spenser-Churchill Scarabs*, thirty-one fine scarabs and a cylinder of Pepi I with barbaric design added. 24-27, *Egyptian working drawings*, Papyrus from Ghurâb with front and side views of a shrine. 33-40, Miss MURRAY, *The costume of the early kings*, a very remarkable and instructive article, suggesting (1) that the very ancient royal *Sed*-festival or "Jubilee" represented the marriage of a king of the Hawk tribe (invaders) to a native queen of the Buffalo tribe, and (2) (a less controversial matter) that the crowns of Upper and Lower Egypt, far from being of metal, were elaborate turbans.

Annales du Service, xxy, 97-104, WAINWRIGHT, *Painted box from Kom Washim*, painted on stucco, a method which perhaps later inspired Persian artists, containing glass bottles. 105-111, id., *Wooden door and stool from Kom Washim*. 112-119, id., *Turaery, etc., from Kom Washim and Gerzah*. 120-134, id., *A hoard of silver from Menshah, Girga Mudiriâh*, eight bracelets and two ingots found with 1200 coins of Nero; remarks on the materials, etc., of ancient Egyptian jewellery. 135-143, id., *A dagger of the early New Kingdom from Zawyet el Amwât opposite Minya*; full discussion of other examples with their variations. 144-148, id., *Antiquities from Middle Egypt and the Fayûm*. Two-nozzled bronze lamp from Oxyrhynchus; limestone slab from El-Lâhûn inscribed "four houses 30 x 20"; four-headed ram in lapis-lazuli from Mazûrah near Deshâshah; Roman glass jug from Gerzah. 256-258, EDGAR, *Engraved designs on a silver vase from Tell Basta, Ramesside (?)* with strange animals and fowling scenes; the objects found with it probably also Ramesside.

The Journal of Egyptian Archaeology, XI, 179-190, LAWRENCE, *Greek Sculpture in Ptolemaic Egypt*. 216-217, DAWSON, *A bronze dagger of the Hyksos period with name of Apepy*. 345, CAPART, *L'art égyptien: études et histoire*, I, reviewed by BLACKMAN. 345, JOHL, *Altägyptische Webestühle und Brettschneberei in Altägypten*, reviewed by N. GRIFFITH, who points out that Mrs. CROWFOOT wove a copy of the belt of Ramesses III on a primitive Sudan loom without the help of cards. XII, 22-23, GRIFFITH, *A drinking siphon from Tell el-Amarnah*, lead fittings for a cane siphon. 52-69, GLANVILLE, *Egyptian theriomorphic vessels in the British Museum*, upholds their Egyptian origin, the animal shape for vases being indigenous in many parts of the world. 75-76, id., *A note on Herodotus II*, 93, publishes a prehistoric vase and an ostrakon

with a group of *Tilapia* fishes nibbling at a ball of food or of fish eggs (V. 110-112, DAVIES, *An apparent instance of perspectival drawing*, the representation of the wheeled funerary cart in the tomb of Sebeknekt at El-Kâb, shown to be without perspective. 138, JÉQUIER, *Manuel d'archéologie égyptienne. I. Les éléments de l'architecture*, reviewed by GLANVILLE. 140, MONTET, *Scènes de la vie privée dans les tombeaux égyptiens de l'Ancien Empire*, reviewed by DAWSON.

Orientalistische Literaturzeitung, XXVIII, 569-571, SPIEGELBERG, *Zu den Jagdbildern des Tutenchamûn*, a block from a hunting scene in PRISSE's *Art* shows that there were temple-scenes of hunting on a great scale by which the miniature scene on the box from his tomb might have been inspired. Cf. above p. 303. 640-641, JÉQUIER, *Matériaux pour servir à l'établissement d'un dictionnaire d'archéologie égyptienne*, reviewed by KEIMER. 846-847, id., *Manuel d'archéologie égyptienne, les éléments de l'architecture*, reviewed by RANKE. 847-848, CAPART, *L'art égyptien*, I, reviewed by SCHARFF. 850-853, Mrs. C. R. WILLIAMS, *Gold and Silver Jewelry and related objects*, reviewed by RÖDER. XXIX, 31-34, SCHÄFER, *Grundlagen der ägyptischen Rundbildnerei*, reviewed by WOLFF. 192-125, SCHÄFER und ANDRAE, *Die Kunst des alten Orients*, reviewed by DAVIES. 161-164, PIEPER, *Zur Ursprung der Tell-el-Jehudije-Vasen*, upholds JUNKER's theory that they were made in Nubia. 342-343, MÖLLER, *Die Metallkunst der alten Ägypter*, reviewed by BONNET. 403-405, RANKE, *Alter und Herkunft der ägyptischen "Löwenjagd-Palette"*, reviewed by PRET. 465-467, SPIEGELBERG, *Zur Datierung des Schatzes von Athribis*: one piece in the find of silver published by ENGELBACH bears the name of a prince Bekenhif pointing to Dyn. XXIII-XXVI, and the rest may be as early as this. 473, the second edition of RUSCH's translation of MASPERO, *Geschichte der Kunst in Ägypten*, reviewed by WOLFF. 474-475, JUNKER, *Die Kultkammer des Prinzen Kanjawsut im Wiener Kunsthistorischen Museum*, reviewed by WIETHMANN. 566-568, BOESER, *Beschreibung der ägyptischen Sammlung des Niederländischen Reichsmuseums*, XII, *Statuetten*, reviewed by RANKE.

PERSONAL.

Georg SCHWEINFURTH, the celebrated African traveller and botanist, a Russian by birth, a German by university training in natural history, died on Sept. 19, 1925, at the ripe age of 89. He arrived in Egypt in 1863 and his great journey to "The heart of Africa" was in 1868-1871 ending in a fire which destroyed all his journals and collections. His studies of the Ancient Egyptian flora, and his exploration and mapping of areas in the Eastern Desert and of the sites of palaeolithic finds at Thebes, bring him into the circle of Egyptology. Obituary notices have been contributed by ERMAN, *Georg Schweinfurth*, to *O.L.Z.*, XXIX, 1-2 and KEIMER, *Georg Schweinfurth*, to *Aegyptus*, VI, 251-254.

Georges BÉNÉDITE died at Luxor, March 23, 1926. Born in 1857 he studied ancient art in Paris and in 1887 joined the Mission archéologique at Cairo, his chief task in Egypt being to publish the scenes and inscriptions of the temple of Philae. When MASPERO returned to Egypt in 1899, he nominated BÉNÉDITE to lecture at the Collège de France in his place. In 1895 he was appointed Conservateur-adjoint of the Egyptian antiquities in the Louvre, and Conservateur in succession to REVILLOUT in 1907. BÉNÉDITE added many fine pieces to the collection and described them admirably in the Piot memoirs. It will be remembered that he contributed to our *Journal* an important memoir on a prehistoric ivory handle in the Carnarvon collection. It was as recently as February 1924 that BÉNÉDITE was elected to the Académie des Inscriptions; an obituary discourse by M. CHABOT, president of the Académie, is printed in the *Comptes Rendus* for March 26, 63-6.

SOMERS CLARKE died on August 31, 1926, aged 85, in the house which he built for himself many years ago at Meheid near El-Kâb. His active interest in Egypt began in 1893 when he joined the late Mr. J. J. TYLOR in a scheme for investigating the antiquities of El-Kâb. He had the good fortune to take part in the wonderful discoveries of Mr. QUIBELL at Hierakonpolis. Some of his architectural studies have been published in our *Journal*, and the results of his work on Nubian and Coptic churches were collected in 1912 in a substantial volume entitled *Christian Antiquities in the Nile Valley*.

An editorial note on the late H. LANG ROTH of Halifax is printed in *Journal*, XI, 333.

The veteran VALDEMAR SCHMIDT left an unfinished autobiography, *Af et langt Livs Historie 1838-1925*, which has now been published and is reviewed by KOEFORD-PETERSEN in *O.L.Z.*, XXIX, 402.

MUNRO gleams from Italian periodicals of a century ago the opinions of writers on CHAMPOLLION's decipherment of hieroglyphic, some enthusiastic for him, others against him and pushing theories of their own. *L'eco della scoperta dei geroglifici, raccolta delle pubblicazioni periodiche italiane contemporanee in Aegyptus*, VI, 297-312.

GABRIELI publishes twenty-five letters written by ROSELLINI from 1826 to 1840, with an appendix on SALVOLINI and his relations with ROSELLINI, and on the various opinions expressed concerning him in ROSELLINI's papers. *Lettere di Ippolito Rosellini al Prof. Ab. Costanzo Gazzera in Aegyptus*, VI, 130-176.

A photograph of Prof. ERMAN in his fortieth year is the frontispiece of vol. LXI of the *Zeitschrift für ägyptische Sprache*, corresponding to the photograph of thirty years later in vol. LX, both of these volumes being dedicated to him.

On the 28th July 1925 an address was offered to Eduard MEYER by the Berlin Academy in honour of the fiftieth anniversary of his doctorate, *Sitzb. Berl. Akad.*, 1925, 325-326.

M. BONNEX has succeeded M. BÉNÉDITE as Conservateur of the Egyptian antiquities in the Louvre and has appointed M. l'Abbé DRIOTON as his assistant.

BIBLIOGRAPHY: CHRISTIAN EGYPT (1925-1926)

By DE LACY O'LEARY

I. BIBLICAL.

(a) *Old Testament.*

O. H. BURMESTER and E. DÉVAUD, *Psalterii versio Memphitica, e recog. Pauli de Lagarde. Réédition avec le texte copte en caractères coptes*, Louvain (1925), ix+iv+180, is a first instalment of a new edition of the extant portions of the Bohairic Old Testament which, save for the edition of Job by E. PORCHER in *Patr. Or.* xviii, are now extremely rare. The present work contains the Bohairic Psalter from DE LAGARDE's edition of 1875, but printed in very good Coptic type, borrowed from the *Muséon*, instead of the transliterated reproduction used by him, and with the introduction and critical notes of the 1875 edition. Admittedly the text given in that edition was an eclectic one, but the recognized excellence of the critical notes makes this a minor defect. "Ce texte et ces notes, dont les critiques ont proclamé la valeur, nous avons reproduits scrupuleusement, ne nous reconnaissant pas le droit, en principe, d'y rien changer" (1st introd. iv). In fact, however, the whole has been very carefully collated with the codices used by DE LAGARDE and corrected where necessary, so that this is in all respects equivalent to a new edition. Students of Coptic will look forward to the promised editions of the Pentateuch, the Prophets, etc. It has been reviewed by H. THOMPSON in *Journal*, xii, 140, and by W. SPIEGELBERG in *O.L.Z.*, 1926, 345.

F. BILABEL, *Griech. Papyri* (iv Hft of *Veröffentl. aus den Badisch. Pap.-Sammlungen*), Heidelberg (1924), contains papyrus fragments (56) of Exodus and Deuteronomy, (57) of Romans.

C. SCHMIDT, *Der Kolophon des Ms. Orient. 7594 des Brit. Mus. in Sitz. d. Preuss. Akad. der Wissensch.*, xxiv (1925), is a new study of the colophon already given in BUDGE, *Coptic Bibl. Texts* (1912), 270-1. H. A. SANDERS, *The subscription of the Freer Papyrus of the Minor Prophets* appears in *Philol. Quarterly*, iii (1924), 161-7.

(b) *New Testament.*

D. BUCKLE, *A Sahidic Variant in a Rylands Manuscript in Bull. Joh. Rylands Libr.*, ix (1925), 602-3, deals with the passages S. Mark xvi. 3, and I Peter i. 8-9, as cited in a homily of S. Shenoute.

(G. HORNER), *Coptic Vers. of the New T....Sahidic*, vii (cf. *Journal*, xi, 320), has been reviewed briefly in the *Times Lit. Supplement* of Oct. 22, 1925, 696, in *Rev. Bibl.*, xxxiv (1925), 623-4, and very fully by Mgr. HEBDELINCK in *Muséon*, xxxviii (1925), 159-69.

Sir H. THOMPSON, *Gospel of St. John* (cf. *Journal*, xi, 320), has been reviewed briefly in *Ancient Egypt*, 1925, 58, and in the *Times Lit. Suppl.*, Oct. 22, 1925, 696. It forms the subject of A. MERK, *Ein neuer Fund aus Aegypten: Eine koptische Hs. des Johannes-Evang.* in *Zeit. Kath. Theol.* xlviii (1924), 456-60.

II. APOCRYPHAL, GNOSTIC, ETC.

(a) *New Testament Apocrypha.*

E. HENNECKE, *Neutest. Apok.*, and M. R. JAMES, *Apoc. New Test.* (cf. *Journal*, xi, 320), are reviewed by J. BEHM in *Theol. Lit. Zeit.*, i (1925), 72-8, and by M. GASTER in *J.R.A.S.*, 1925, 728-30. HENNECKE's edit. is more briefly reviewed by M. GASTER in *Folk Lore*, xxxvi (1925), 195-6.

(b) *The Logia.*

J. DONOVAN, *The Logia* (cf. *Journal*, xi, 321), led to a controversy in the *Tablet* of January 3 and 17, 1925: the discussion is summarized and criticized in *Rev. Bibl.*, xxxiv (1925), 445-6.

(c) *Gnosticism.*

C. SCHMIDT, *Pistis Sophia* (cf. *Journal*, xi, 321), has been reviewed by P. PEETERS in *Anal. Boll.*, xliii (1925), 404-5, by G. HORNER in *Journal*, xi, 335-6, by H. LIETZMANN in *Zeit. f. Neut. Wiss.*, xix (1925), 313-14, and by W. SPIEGELBERG in *O.L.Z.*, xxix (1926), 182-5.

C. SCHMIDT, *Die Urschrift der Pistis Sophia* in *Z. f. Neut. Wiss.*, xix (1925), 218-40, has been reviewed with the edition already mentioned and the translation (cf. *Journal*, xi, 321) by L. TH. LEFORT in *R. Hist. Eccl.*, 1926, 352-4, and briefly noted with other works in the *Times Lit. Suppl.* of Oct. 22, 1925, 696.

G. HORNER, *Pistis Sophia* (cf. *Journal*, xi, 321), has been reviewed by P. P(ETERS) in *Anal. Boll.*, xliii (1925), 403-4, by J. LEIPOLD in *O.L.Z.*, xxviii (1925), 800, and by C. SCHMIDT in *Theol. Lit. Z.*, i (1925), 225-6. The two editions of SCHMIDT and HORNER have been reviewed together by W. E. CRUM in *J.R.A.S.*, 1925, 757-60, and briefly noticed in the *Times Lit. Suppl.* of Oct. 22, 1925, 696.

The views expressed in the introduction to SCHMIDT, *Pistis Sophia*, have received detailed examination in F. C. BURKITT, *Pistis Sophia and the Coptic Language* in *J.T.S.*, xxvii (1926), 148-57. This is summarized: "According to SCHMIDT, *Pistis Sophia*, a late and comparatively unintelligent production of syncretistic Graeco-Egyptian Gnosticism, composed in Greek, was translated into Coptic by a not always intelligent translator. According to BURKITT, *Pistis Sophia*, a late and comparatively unintelligent production, was composed in Coptic, the sources being partly Greek and partly Coptic works belonging to the later stages of Gnosticism in Egypt" (*op. cit.*, 154). Prof. BURKITT's views on the Coptic language are mentioned below (p. 310).

The new edition of E. DE FAYE, *Gnostiques et Gnosticisme* (cf. *Journal*, ix, 227), has been reviewed by R. GOGUEL in *Rev. d'hist. et de philos. relig.*, Strasbourg, v (1925), 291-2, by J. LEBRETON in *Rech. de sci. relig.*, Paris, xv (1925), 355-75, by D. FONTAINE in *Archives de la France monastique*, Paris, xv (1926), 3*, by A. D'ALÈS in *Étud. pub. par les PP. de la Comp. de Jésus*, Paris, clxxxiv (1925), 369-70, and by A. DONINI in *Rich. Relig.*, Rome, i (1925), 484-5.

H. LEISEGANG, *Die Gnosis* (cf. *Journal*, xi, 321), has been reviewed by J. P. STEFFES in *Lit. Handwörterb.*, Ratisbon, lx (1924), 421.

K. E. TRISTAN, *Die Gnostiker oder die unsichtbare Kirche*, Rad Schmiedeberg (1925), viii + 179, with fig. and 1 plate, has been reported, but I have not been able to see a copy.

(d) *The Manichees.*

F. C. BURKITT, *Religion of the Manichees* (1925), viii + 130, 3 plates, gives a general account of the rise and spread of the religion of Mani, but, though reference is made (p. 119) to Manichaean propaganda in Egypt, no further account is given of its spread there. Appendix III contains the three sets of Manichaean fragments which have been found in Egypt. It has been reviewed by R. T. in *Rev. Bibl.*, xxxiv (1925), 612-13, by K. HOLL in *Theol. Lit. Zeit.*, li (1926), 30-1, and more briefly noticed by M. GASTER in *J.R.A.S.*, 1925, 559-60, and by H. J. D. ASTLEY in *Hibbert Journal*, xxiii (1925), 764-6.

F. BILABEL, *Ein kopt. Fragment* (cf. *Journal*, x, 325), has been reviewed by H. DUENSING in *Theol. Lit. Zeit.*, li (1926), 185. The fragment is an extract from Cyril of Jerusalem.

W. BASG, *Manichäische Hymnen in Musön*, xxxviii (1925), 1-56, and Dr. S. DÜPFER, *Akron ben Eliä über die Manichäer* (*ibid.*, 57-66), contain material illustrating the history and teaching of the Manichees, but have no direct bearing on Egypt.

III. LITURGICAL.

L. VILLECOURT, *Les observances liturgiques et la discipline du jeûne dans l'église copte* in *Musön*, xxxviii (1925), 261-320, continues the valuable analysis of the contents of Abu l-Barakat's "Lamp of Darkness" commenced two years ago (cf. *Journal*, x, 325). This portion deals especially with the rites of Holy Week and Easter. It is followed by a brief concordance between the Paris and Upsala codices.

D. O'LEARY, *Coptic Difnär*, Lond. (1926), vi + 119, gives the text of the Difnär (antiphonarium) for the first four months of the year.

D. O'LEARY, *Frag. Coptic Hymns* (cf. *Journal*, x, 325), has been reviewed by J. LEIPOLD in *O.L.Z.*, xxviii (1925), 654, by S. A. B. MERCER in *J. Soc. Orient. Res.* (1925), 83, and by P. P(ETERS) in *Anal. Boll.*, xliiv (1926), 165-6.

F. BILABEL, *Griech. Pap.* (cf. I above), contains (58) a fragment of a Christian liturgy.

IV. CHURCH LITERATURE.

(a) *Patres Apostolici.*

H. DUENSING, *Epistula Apostolorum, nach dem äthiopischen und koptischen Text*, Bonn (1925), 42, has been reviewed by C. SCHMIDT in *O.L.Z.*, xxviii (1925), 855-9.

BIHLMAYER, *Die Apostolischen Väter*, I (Didache, Barnabas, Clement I, II, Ignatius, Polycarp, etc.), Tübingen (1924), 1-163, is a re-edition of F. X. FUNK's manual, but brought up to date by additional notes. It is briefly noticed in *Rev. Bibl.*, XXXIV (1925), 624, and more fully reviewed by E. LOHMEYER in *Theol. Lit. Zeit.*, LI (1926), 29-30.

Further studies in the P. Oxy. text of Hermas appear in BONNER CAMPBELL, *A papyrus codex of the Shepherd of Hermas in Harvard Theol. Rev.*, XVIII (1925), 115-23, and S. G. MERCATI, *Passo del pastore di Erma riconosciuto nel P. Oxy. 1228 in Biblica*, VI (1925), 336-8.

(b) *Patristic Theology.*

M. FERMI, *L'apologia di Aristide e la lettera a Diogneto* appears in *Ricerche Relig.*, Rome, I (1925), 541-7.

(c) *Ethiopic Church Literature.*

On the closely allied Ethiopic literature may be noted the brief survey of J. M. HARDEZ, *An Introduction to Ethiopic Christian Literature*, Lond. (1925), 118.

V. HISTORY.

(a) *The Egyptian Church, general history and special periods.*

M. CHAÏNE, *La chronologie des temps chrétiens de l'Égypte et de l'Éthiopie*, Paris (1925), xvi+344, has now appeared and has been reviewed by Prof. L. TH. LEFORT in *R. H. Eccl.*, XXII (1926), 338-9, who says: "M. Ch. a le mérite d'avoir réuni une collection considérable de renseignements sur la chronologie; il les a malheureusement présentés de façon telle que le lecteur scrupuleux devra, en les utilisant, y mettre beaucoup du sien pour avoir tous ses apaisements," and by P. P(ETERS) in *Ann. Boll.*, XLIV (1926), 144-7.

H. DELEHAYE, *Le calendrier d'Oxyrhynque* (cf. *Journal*, XI, 325), is briefly described by A. E(HRHARD) in *Byz. Zeit.*, 1925, 419-20.

F. HAASE, *Altchristliche Kirchengeschichte nach orientalischen Quellen*, Leipzig (1925), xvi+420, practically ignores all Coptic material. It has been reviewed by P. P(ETERS) in *Anal. Boll.*, XLIV (1926), 142-4.

H. I. BELL, *Jews and Christians in Egypt* (cf. *Journal*, I, 327), continues to receive considerable attention, as might be expected, and has been reviewed by H. GRÉGOIRE in *Byzantion*, I (1924), 638-47, by E. SCHWARTZ in *Deut. Lit. Z.*, 1924, no. 30, by P. JOUGUET in *C. R. Acad. Inscr.*, 1924, 222, by the same writer in *J. des Sav.*, XXXI (1925), 1 sqq., by C. GHEDINI in *Aegyptus*, VI (1925), 272-6, by M. HOMBERT in *Rev. Belg. Phil.*, 1925, 197-203, by W. SCHUBART in *Gnomon*, I (1925), 23-36, by MAX RADIN in *Classical Philology*, XX (1925), 363-75, by N. H. B. in *J. Hell. Stud.*, 1924, 311-13, by VON SODEN in *Theol. Lit. Z.*, I (1925), 251-3, and by A. S. HUNT in *Journal*, XI, 341-2.

BELL's work has inspired several other studies, notably K. HOLL, *Die Bedeutung der neuveröffentlichten meletianischen Urkunden für die Kirchengeschichte*, in *Sitz. der Preuss. Akad.*, 1925, 18-31, which examines its bearing upon the Meletian schism and upon the development of monasticism; G. GHEDINI, *Luci nuove dai papiri sullo scisma meletiano e il monachismo in Egitto* in *La Scuola Cattolica*, Milan, LIII (1925), 261-80; A. D'ALÈS, *Le schisme méletien d'Égypte* in *Rev. Hist. Eccl.*, XXII (1926), 5-26; and R. P. CASEY, *New papyri concerning incidents at Alexandria* in *Harv. Theol. Rev.*, XVIII (1925), 285-92.

H. I. BELL, *Athanasius in Congregational Quarterly*, III (1925), 158-76, is a popular account of one portion of the subject-matter of the preceding.

MACLEB, *Les chrétientés orientales* (cf. *Journal*, XI, 323), is reviewed by A. J. GOSSEIF in *Expos. Times*, XXXVI (1925), 475, and A. FORTESCUE, *Uniate Eastern Churches* (cf. *Journal*, XI, 323), by N. A. BEES in *O.L.Z.*, XXIX (1926), 254. The non-uniate eastern churches are briefly discussed by J. KEATING in *The Month*, CXLVI (1925), 130-42.

L. LACOMBE, *Chronique des églises orientales: (iii) Patriarcat orthodoxe d'Alexandrie* in *Échos d'Or.*, XXIX (1926), 230-2, deals with the political difficulties encountered in the election of a patriarch of the Greek Church in Egypt.

The history of the Ethiopic Church is very closely connected with that of the Church of Egypt and here we may note M. DE COPPET, *Le christianisme en Éthiopie* in *Rev. de Genève*, 1926, 158-73, which is, however, only a brief outline of the history and leading characteristics of the Ethiopic Church, and some chapters in A. KAMMERER, *Essai sur l'histoire antique de l'Abyssinie* (1926), 198, 4 maps, 45 figures, also have an indirect bearing upon Coptic church history.

(b) *Monasticism.*

I. C. HANNAH, *Christian Monasticism*, Lond. (1925), 270, is briefly noticed in the *Times Lit. Suppl.* of July 23, 1925, 494.

REITZENSTEIN, *Hist. Monach. und Hist. Lausiacae* (cf. *Journal*, v, 207), receives a somewhat belated notice from O. STÄHLIN in *Byz. Zeit.*, xxv (1925), 160-3.

W. GEMOLL, *Das Apophthegma*, Vienna (1924), viii+177, has been reviewed by H. DELEHAYE in *Ann. Boll.*, xliii (1925), 401-2.

(c) *Church Institutions.*

VON WOESS, *Asylwesen* (cf. *Journal*, xi, 323), has been reviewed by G. HELBIG in *Theol. Lit. Zeit.*, xlix (1924), no. 22, by D. COHEN in *Museum*, xxxii (1925), 246-248, by FR. PRINGSHEIM in *Vierteljahresschrift f. Sozial- u. Wirtschaftsgesch.*, xviii (1925), 399-402.

(d) *Lives of the Saints.*

H. DELEHAYE, *Les recueils antiques de miracles des saints* (cf. *Journal*, xi, 324), has been continued and completed in *Ann. Boll.*, xliii (1925), 305-25.

H. DELEHAYE, *Les martyrs d'Égypte* (cf. *Journal*, ix, 231), has been reviewed by L. VAN DER ESSEN in *R. Hist. Ecl.*, 1926, 354-7.

E. A. BROOKS, *Acts of St. George* in *Muséon*, xxxviii (1925), 67-115, deals with the Syriac material which has no direct bearing upon the Coptic acts.

The Bollandist *Acta Sanctorum*, Novembris, tom. iv (1925), xii+767, contains two lives which have more or less direct bearing on the Egyptian Church. One of these is the (Greek) life and miracles of St. Theodore (11-55), the other is the life of St. Timotheus of Antioch (115-22).

L. TH. LEFORT, *S. Pachomii Vita Bohairice scripta* (1925), v+250, appears as a new volume in the C.S.C.O. series.

H. DELEHAYE, *La personnalité historique de S. Paul de Thèbes* in *Ann. Boll.*, xliiv (1925), 64-9, discusses the historical basis of St. Jerome's life of St. Paul the first hermit.

S. P. GIRARD, *Un frag. papyrologique du viert. de Ste. Philothée* (cf. *Journal*, x, 328), is reviewed by P. PETERSEN in *Ann. Boll.*, xliiv (1926), 165.

J. BALESTRI et H. HYVERNAT, *Acta Martyrum*, II (C.S.C.O., 1924), 384, contains the martyrdoms of S. Luke, S. Cyriacus, S. James the Persian, S. Polycarp, S. Isaac of Tiphre, the two Theodores, S. John of Phumidjot, S. Theodotus, S. George, and the miracles of S. George, all re-publications of material which has already appeared elsewhere.

VI. NON-LITERARY TEXTS.

(a) *Collected Texts.*

CRUM-BELL, *Wadi Sarga* (cf. *Journal*, ix, 232), has been reviewed by M. A. MURRAY in *Anc. Egypt*, iv (1925), 117, and by HENGSTENBERG in *Byz. Zeit.*, xxv (1925), 158-9.

WORBELL, *Coptic MSS. in the Freer Collection* (cf. *Journal*, x, 324), is briefly noticed in the *Times Lit. Suppl.* of Oct. 22, 1925, 696.

GHEDENI, *Lettere cristiane* (cf. *Journal*, x, 329), has been reviewed by N. HOHLWEIN in *Bull. bibliog. Mus. Belg.*, xxix (1925), 18-19, and by the same writer in *Byzantion*, i (1924), 634-5.

CH. WESSELY, *Les plus anc. mon. du Christianisme* (cf. *Journal*, xi, 324), has been reviewed by CALDERINI in *Aegyptus*, v (1924), 369, and by J. SIMON in *Ann. Boll.*, xliii (1925), 377-9.

W. E. CRUM, *Theological Texts* (cf. *Report* (1912-13)), is reviewed by HENGSTENBERG in *Byz. Zeit.*, xxv (1925), 156-7.

(b) *Separate Texts.*

W. E. CRUM, *Koptische Zünfte und das Pfeffermonopol* in *Z.A.S.*, ix (1925), 103-11, deals with the contents of Brit. Mus. Or. 8003, an 8th cent. papyrus from Edfu, in which various heads of trade guilds acknowledge the receipt of paper from the government.

JERNSTEDT, *Ein koptisches Ineditum der Eremiten* in *Raccolta di Scritti in onore di G. Lombroso*, Milan (1925), 282-6, gives and examines a brief text of 12 lines.

(c) *Glossaries.*

H. I. BELL and H. THOMPSON, *Greek-Coptic Glossary to Hosea and Amos* in *Journal*, xi, 241-6, 4 plates, has a special interest in that it implies the use of a version different from the Receptus.

H. I. BELL and W. E. CRUM, *A Greek-Coptic Glossary in Aegyptus*, vi (1925), 177-226, reproduces a glossary "entirely in Dioscorus's own hand" of date between 567 and 573 A.D. containing names of parts of the body, topographical terms, names of animals, fishes, etc. The glossary is from P. Lond. 1821, and contains 436 lines.

(d) *Magical.*

S. EITHEM, *Additional remarks on the magical Papyrus P. Leid. v in Aegyptus*, vi (1925), 117-20, continues and concludes the notes given in *ibid.*, iv (1923), 183.

S. EITHEM, *Les papyrus magiques grecs de Paris* (cf. *Journal*, xi, 325), has been reviewed, in conjunction with WILCKEN's *Urkunden der Ptolemäerzeit* and HOFFNER's *Griech.-Äg. Offenbarung*, by W. SCHUBART in *O.L.Z.*, xxviii (1925), 645-7.

S. EITHEM, *Pap. Brit. Mus. CXXI, verso, col. 1* appears in *Journal*, xi, 80-3. It deals with a fragmentary magical text published in WESSELY, *Neue griech. Zauberpap.* (1893).

F. BILABEL, *Griech. Pap.* (cf. I above), contains two tablets (60, 65), inscribed respectively with the Lord's Prayer and a Christian text which the editor regards as being intended for magical use.

VII. PHILOLOGY.

M. SAN NICOLÒ, *Das εἶπε ἀνρσσηον als Stellvertretungsformel in den koptischen Papyri* appears in *Byz. Zeit.*, xxiv (1924), 336-45.

E. DRIOTON, *Un mot nouveau copte* appears in *Rev. Ég. Anc.*, i (1925), 15-17.

K. ARMUS, *Koptische Grammatik zum Gebrauch für Vorlesungen*, Hanover (1925), is reported, but I have not been able to see a copy.

I. GUIDI, *Elem. Linguae Copt.* (cf. *Journal*, x, 329), has been reviewed by W. SPIEGELBERG in *O.L.Z.*, 1925, 76-8.

G. P. G. SOBHY, *Kitāb Qawā'idu l-Loghātī l-Maṣriyātī l-Qubṭiyya*, Cairo (1925), iv + 253, is a grammar intended to make a scientific treatment of Coptic grammar accessible to Egyptian students. It is published at the expense of the Egyptian government and is intended for use in the Egyptological section in the Egyptian University. Unfortunately it is no longer on sale to the public and only distributed (gratuitously) to the students concerned. It has been briefly noticed by D. O'LEARY in *Journal*, xii, 139-40.

G. P. G. SOBHY, *Studies in Coptic Proper Names in Anc. Egypt*, 1925, 41-4, notes some purely Egyptian names still in common use and some old Greek names, as well as Arabic, Turkish, and others of more recent date.

Glossaries of ancient date are included in VI above.

K. SETHÉ, *Das Verhältnis zwischen Demotisch und Koptisch und seine Lehren für Geschichte der Ägyptischen Sprache* in *Z.D.M.G.*, 1925, 290-316, is an extremely important contribution to the history of the Coptic language. The writer suggests that Coptic was the vernacular descended from ancient Egyptian, whilst Demotic was an artificial language. This is very different from the view of F. C. BURKITT in *Pistis Sophia and the Coptic Language* (cf. II above), where we read that "I have doubts as to the full legitimacy of the Coptic language. I do not mean by this to doubt that the speech of the Egyptian peasantry at the time of the Arab invasion was a real, though degraded, descendant of the speech of the Pharaohs. But I do not think it was Coptic, if by 'Coptic' is meant a language in which Greek words, including the most exotic particles, are used freely.....I do not believe that the language of the Coptic liturgy and Bible was ever the real language of the people: it was from the beginning a more or less literary jargon" (153). Professor BURKITT considers that the use of this "literary jargon" in domestic and intimate ostraka etc. must be explained by non-literary persons having recourse to professional scribes who followed the current fashion of interpolating Greek words. The whole problem has a parallel in Urdu, where a great number of Arabic and Persian words have been introduced under Muslim influence and there, admittedly, many have taken root in the vernacular speech.

P. JERNSTEDT, *Zum Gebrauch des koptischen Qualitativen* appears in *Compt. Rend. de l'Acad. des Sci. de l'U.R.S.S.*, Leningrad (1925), 74-7.

W. SPIEGELBERG, *Demotica*, i, Munich (1925), 49, 3 plates, contains two directions on Coptic, i.e. (ix) *dj r (ⲉⲓ) "schlagen"* (25-7), and (xi) *Die Etymologie von ⲙⲛⲩⲁ* (27-8).

VIII. ARCHAEOLOGY.

H. HESSE, *Tell Edfou in Aegyptus*, vi (1925), 285-8, gives an account of explorations commenced in 1914 and continued in 1921-4 in an area which was inhabited down to the 10th cent. A.D. and where finds have been made of Coptic and Muslim pottery, small articles, buildings, and a deposit of Coptic papyri in a jar. The Coptic manuscripts are being edited by M. DRIOTON, the Muslim and Coptic pottery is in the hands of M. MASSOUL.

U. MONNERET DE VILLARD, *Les couvents près de Sohâg*, i. *Deyr el-Abiad et Deyr el-Ahmar*, Milan (1925), 64, 113 plates, contains three chapters, (i) descriptive of the White Monastery, (ii) a brief survey of archaeological investigations by previous explorers, and (iii) a discussion on the trefoil-shaped sanctuary: very slight reference to the Red Monastery. It has been reviewed by H. in *Ass. Egypt.*, iv (1925), 115, by P. PENTERS in *Ann. Boll.*, xliii (1925), 419-20, by A. CALDERINI in *Aegyptus*, vi (1925), 280, and by R. LEMAIRE in *Muséon*, xxxviii (1925), 354-5.

H. RANKE, *Koptische Friedhöfe bei Karara und der Tempel-Schaschonska I bei el-Hiba. Bericht über die badischen Grabungen in Aeg. in den Wintern 1912-13 und 1913-14...unter Mitwirkung von H. Abel und K. Breith* (1925), 70, with 82 figs. in the text, and 40 plates, has now appeared (cf. *Journal*, xi, 325).

H. JUNKER, *Die christlichen Grabsteine Nubiens in Zeitschr. f. äg. Spr.* ix (1925), 111-48, deals with both Greek and Coptic material. Amongst the latter appear Lep. 556 = Berl. Inv. No. 1499, LD. vi, 103, Nr. 43 = Berl. Inv. No. 1495, Lep. 51, and B.Mus. 825.

H. JUNKER, *Ermaene, Bericht über die Grabungen der Akad. der Wiss. in Wien auf den Friedhöfen von Ermaene (Nubien) im Winter 1911-12*, Wien (1925), 175, 16 plates, 1 plan, 9 figs., contains Christian material and Coptic inscriptions in Part D (126-65).

M. DIMAND, *Die Ornamentik der äg. Wollweirereien* (cf. *Journal*, xi, 326), has been reviewed by NORA GRIFFITH in *Journal*, xi, 344, by H. GLÜCK in *O.L.Z.*, xxviii (1925), 654, and by S. A. B. MÜNCHER in *J. Soc. Or. Res.*, ix (1925), 79.

W. F. VOLBACH and E. KUERNEL, *Late antique, Coptic, and Islamic textiles of Egypt* (1926), xvi + 100 plates, mostly in colour (cf. *Journal*, xi, 326), has now been published.

M. DIMAND, *Coptic textiles, Recent Accessions* in *Bull. Metrop. Mus. of Art, N.Y.*, xxi (1926), 102-5, describes some recent accessions made to the museum in question.

O. M. DALTON, *East Christian Art*, Oxford (1925), xv + 396, makes some passing reference to Coptic art (42-4), sculpture, manuscripts, textiles, and ceramics, but Coptic occupies only a minor place.

W. SCHUBART, *Palaeographie. I. Griech. Palaeogr.*, Munich (1925), 184, 121 figs., deals incidentally with Coptic script (146, 156).

Passing reference to modern Coptic usage as to the removal of the hair tuft on children is made in W. BLACKMAN, *Ancient Egyptian custom illustrated by a modern survival* in *Man*, xxv (1925), 65.

J. STREYGOWSKI, *Origins of Christian Church Art* (cf. *Journal*, x, 330), has been reviewed by M. GASTER in *J.R.A.S.*, 1925, 142-3.

A. J. BUTLER, *Islamic Pottery*, is announced for the autumn of 1926. It will contain about 20 plates in colour and 80 in black and white. Some of the illustrations will show early Coptic lustre ware, including a ruby-lusted bowl and plain lustred vessels, and at least one chapter (ix) will deal with pre-Muslim Egyptian ceramics.

NOTES AND NEWS

The Society of Antiquaries once more generously placed its Council Room at the disposal of the Society for the purpose of the annual exhibition of antiquities, the results of the winter's campaign, which was open from July 5th to the 24th. Practically all the objects shown came from the cemeteries at Abydos, where excavations were carried on for a brief period and proved very successful. Equally interesting were the large scale photographs and plans of the Cenotaph of Seti I, formerly called the Osireion.

As a report on the season's work appears elsewhere in this number there is no need for a full description here, but among the most interesting exhibits may be mentioned a finely carved stela, a small limestone statuette of a seated dignitary of the Middle Kingdom, and a most varied collection of beads of all periods from the predynastic to the Late New Kingdom, all threaded with the utmost care, mostly in the original order, and very tastefully arranged by Mr. and Mrs. Brunton and Mrs. Frankfort.

In addition a facsimile painting by Mrs. de Garis Davies of a beautiful fresco in the North Palace at Tell el-Amarnah was shown. The fresco is a magnificent example of the art of the Akhenaten period, and readers will be glad to know that Mrs. Davies has consented to go out again during the coming winter and copy other wall paintings in the same palace. It is the intention of the Committee to publish a special memoir dealing with the mural decoration of Tell el-Amarnah, a work due to the memory of Mr. Newton who first discovered these frescoes.

During the Exhibition Mr. Frankfort twice lectured, with an admirable series of lantern slides, on the work of the season.

The excavation programme for the coming winter, so far as it has been arranged at the moment of going to press, is that Mr. Frankfort and Mr. Glanville should go to Tell el-Amarnah and continue the excavation of that site, while Mrs. Davies copies the wall paintings. This work is not likely to occupy much more than two months. Mr. Felton goes to Abydos to continue his photographic survey of the temple of Seti I, the archaeological and philological side of this work being in the hands of Mr. R. O. Faulkner. This party will be joined later by Mr. Frankfort, who will prepare for publication the texts of the Cenotaph of Seti. The photographing and collating of the temple texts is a costly and laborious work, but the results should prove well worth the outlay.

It has not yet been possible to make a complete list of lectures for the winter, but the Committee hopes to be able to arrange a series on noted towns of Egypt. The following lectures have been promised: Thebes, by Dr. H. R. Hall; Herakleopolis, by Dr. A. M. Blackman; Sais, by Professor Newberry; Memphis, by Mr. S. R. K. Glanville; while it is hoped that Naukratis and Alexandria will be dealt with by Dr. Hogarth and Mr. H. I. Bell respectively.

In our last number we alluded to the magnificent offer of £2,000,000 made to the Egyptian Government by Mr. John D. Rockefeller, Jr. for the building and equipment of a new museum and the advancement of Egyptological studies in general. Little did we think

at the time that this offer would be refused. It is not our task to examine or criticise the causes which led to its rejection, we can only lament that such an amazing opportunity has been allowed to slip. When we think of the numerous branches of the subject which stagnate, partly for lack of funds, partly for lack of workers, and reflect that Mr. Rockefeller's gift would have provided both, we cannot but be appalled by the magnitude of this disaster to learning.

Dr. Howard Carter continues slowly and efficiently to clear the tomb of Tutankhamûn. An admirable arrangement which, while enabling tourists to visit the tomb, takes off his hands the unprofitable and time-wasting duty of escorting them now allows him to give his full time to the clearance. The tomb-chamber is completed and it is believed that a season will be necessary for each of the two remaining rooms. Dr. A. E. Lucas is still attached to the expedition as chemical expert. What he has learnt during the excavation of this tomb is sufficient to revolutionize our knowledge of what may be called the chemistry of ages, i.e. the changes which take place in various materials lying for centuries in certain conditions of atmosphere, light and temperature. Following up his little handbook on the restoration of antiques published a year ago and reviewed in this *Journal* he will shortly produce a further work on ancient Egyptian materials and the changes to which they are subject.

Mr. Robert Mond continued during last season his excavations at Shêkh 'Abd el-Kurnah, Thebes, under the aegis of the Liverpool University Institute of Archaeology. He was again assisted by Mr. W. B. Emery. Further clearances and restorations in the tomb of Ramose occupied the greater part of the season: a number of columns have been rebuilt in their original form in the hypostyle hall, and the scientific world should be very grateful to Mr. Mond for thus restoring and making accessible one of the finest and historically most interesting private tombs in the Theban necropolis. Among other finds was a subterranean gallery containing over twenty burials of about Twenty-second Dynasty date. Below these was a mummy of the Eighteenth Dynasty, and a few traces of a still earlier burial of the Middle Kingdom. Mr. Mond has also prospected on a new site at Erment where he hopes to work during the coming season. He is publishing the reports of his excavations from year to year in the *Liverpool Annals of Archaeology and Anthropology*.

We publish in this number an obituary notice of Bernard Pyne Grenfell, one of the founders of papyrology as a science. A forthcoming volume in the Oxyrhynchus series, to which he himself contributed so largely, is, we understand, to be dedicated to his memory, and will contain a photograph of him: for this reason we have decided not to publish one in this number.

We regret to have to chronicle a further loss to Egyptology in Georges Bénédict, Keeper of the Egyptian Department of the Musée du Louvre, who died rather suddenly on a visit to Thebes during last season. In spite of his duties in the museum and the lecture-room he contrived to contribute a great deal to the literature of Egyptology, his main interest being in objects possessing an artistic value, more particularly those dating from the earlier periods. Several articles from his pen have appeared in the *Journal*.

He is succeeded by Monsieur Charles Boreux, while to take the place thus rendered vacant Monsieur l'Abbé Drioton is to come to the Louvre.

Every reader of the *Journal* will congratulate Colonel H. G. Lyons on the honour of knighthood which has been bestowed upon him. Although the services for which this is the just reward consist of a long and useful career in the Survey Department of Egypt followed by distinguished war service, Colonel Lyons will not, we feel sure, resent the desire of Egyptologists to claim him as a colleague. The connection between the Survey and our science was close by nature, and he himself has made it closer.

Mrs. Winifred Brunton has made an interesting and successful experiment in her book called *Kings and Queens of Ancient Egypt*. Her delicate brush has depicted for us a number of royal personages, not as an idle fancy might imagine them—a task which has often been done before—but as their mummies, their statues and contemporary written records show them to have been. Her art on this occasion is almost that of the miniaturist, and despite her rigid adherence to the evidence on which her reconstructions are based she has succeeded in putting into each portrait something of herself. They are not merely conceptions of kings and queens, they are *her* conceptions. To those of us who have little or no imagination the work is a revelation, and even to those whose conceptions may disagree with those of the painter the portraits will give pleasure from the artistic point of view. They are accompanied by a text contributed by a number of Egyptologists.

The sixtieth volume of the *Zeitschrift für ägyptische Sprache* was dedicated to Adolf Erman, who attained his seventieth birthday on Oct. 31st, 1924. The sixty-first volume contains a photograph of the same scholar in his fortieth year. Comparing this with the recent photograph published in the previous volume one is glad to observe that the last thirty years, though devoted to ceaseless toil, have not dealt too hardly with Professor Erman. We trust that he may be long spared to continue his contribution to our knowledge of the Egyptian language which already owes such an immense debt to him. It must be a great satisfaction to him to see so many brilliant young scholars at work in the field which his grammatical researches opened up to them in such a wonderful manner. This year in particular he may well feel that he is reaping a rich harvest, for the publication of the great *Wörterbuch* is now no longer a dream but a partly accomplished fact, and before this number appears we shall probably have in our hands Dr. Alan Gardiner's great *Egyptian Grammar*, the biggest single contribution to the grammar of the Egyptian language since Erman's own *Sprache des Papyrus Westcar* and Sethe's *Verbum*.

Professor Westermann writes:

In the last number of this journal (*Journal*, XII, 38–51) an article appeared in which I offered an explanation of the double entries upon some of the Ptolemaic receipts. It was unknown to me when I was writing it that the same problem was undergoing careful and complete consideration at the hands of Mr. J. G. Milne. Mr. Milne's article, entitled "Double Entries in Ptolemaic Tax Receipts," appeared in the number of the *Journal* immediately preceding that in which mine was printed. Sickness and its after effects prevented me from keeping up with the journals during the late winter and spring, so that Mr. Milne's treatment escaped my notice until it was too late to have the corresponding part of my article deleted. The Editor has consented to print this explanation of an unintentional discourtesy upon my part to the readers of the *Journal* and to Mr. Milne. As to the two conclusions there is little question that he has the right of it.

With regard to his article "What happened after the Death of Tutankhamūn" (see above, pp. 168-170) Professor Sayce writes as follows:

"Since my article was in type Dr. Forrer has published a translation of the text in his *Forschungen*, II, Pt. I. As our translations agree almost word for word they may be considered to be a proof that the Hittite texts can now be translated with as much certainty as the inscriptions of Assyria or Babylonia. Apart from the difference in the word which we supply in the lacuna before the name of Kurustama, and the different conclusions we draw from the last paragraph, our agreement is complete."

Several contributors to the *Journal* seem puzzled as to why they are asked, when returning corrected proofs to the Editor, to return also the original copy or first proof. The reason is that these nearly always enable the Editor to settle those numerous little uncertainties which arise at the last minute without involving the contributor and himself in a tiresome correspondence.

NOTICES OF RECENT PUBLICATIONS

Orient und griechische Philosophie. Von THEODOR HOPFNER. (*Beihefte zum Alten Orient*, Heft 4.) Leipzig: J. C. Hinrichs'sche Buchhandlung, 1925. Pp. 90.

Professor Hopfner needs no introduction to readers of this *Journal*. His new monograph is eminently readable, sane, and learned. He shows in detail the lateness of the traditions which assert that early Greek philosophers derived their doctrines from the East¹, the impossibility of their having learnt the philosophic secrets of the priests of Egypt if the latter had had philosophic secrets to teach, the difference of Eastern science and Greek science, the change in the attitude of the East in the Hellenic Age (on this his remarks, pp. 46 ff., are particularly important), and the growth among Greek thinkers of a veneration of Oriental wisdom and a desire to find therein the source of Hellenic thought. All this is very well done; we have here a well-written chapter in the history of the Greek spirit, its independence and its decline. Of the blending of thought under the Empire, and of such illustrations thereof as the Hermetic texts and the *Oracula Chaldaica*, Professor Hopfner writes with particular mastery. A reference might be added on p. 74 to Cumont's persuasive argument in *Monuments Pict.* xxv that the mysticism of Platinus was influenced by Egyptian piety.

This is a valuable addition to an interesting series.

A. D. Nock.

Gnostiques et gnosticisme. Par E. DE FAYE. Études critiques des documents du gnosticisme chrétien aux II^e et III^e siècles. Deuxième édition augmentée. Paris: Gauthier, 1925. Pp. 547. 60 francs.

This work, which comes before us in an enlarged and revised form, treats a subject of extreme complexity with masterly lucidity. M. de Faye's principle that we must base our conception of the Gnostics on the surviving fragments of their works rather than on the polemic of their adversaries is unquestionably right, and his application of it is very fruitful and results in a picture which, in spite of its gaps, is fuller than we could draw of any pagan religious movement of the time. It is a picture, moreover, which fits what we know of the general intellectual and religious conditions of the age; in particular its passage from speculation of no mean order to theurgy is parallel to the evolution of Neoplatonism. The author's explanation of the point of view of the Gnostics, pp. 463 ff., shows remarkable insight. It is not enough to decompose their beliefs: doctrine, as Reitzenstein has reminded us, cannot be analysed as though it were a mineral. M. de Faye asks what attracted men of this type to Christianity, and finds as his answer the attraction of Jesus, and shows how, in developing their theories, they had no intention of being other than Christian. It would not be easy to find many questionable statements of fact in this book. On p. 65, M. de Faye describes the Valentinian conception of evil in the soul as "fort éloignée de l'idée grecque. Pour Socrate, Platon ou Épicète, le mal a sa source dans une erreur du jugement." The statement perhaps requires balancing by the remembrance that in Orphic and other circles there was an objective view of sin as something essentially defiling the soul. We note, on p. 479, the remark, "MM. Anrich et Wobbermin ont démontré que les gnostiques ont emprunté aux mystères grecs quelques-uns de leurs termes les plus caractéristiques, tel que *λοῦτρον*, *σφραγίς*, *τέρας*, *σωτήρ*, etc." At the present time this statement seems rather over-confident, especially with regard to the term *σωτήρ*. M. de Faye draws attention (pp. 245 ff., 445) to the flourishing Gnostic sects in Rome itself; it would be interesting to know whether he believes the graffito of a crucified ass-head on the Palatine to be due to an adherent of the Sethians, as is thought by A. BLANCHET, *Comptes rendus de l'Académie des inscriptions*, 1920, 152 f., and A. BOULANGER, *Orphée*, 147, and again whether he accepts Blanchet's ascription of two gems, published *loc. cit.* 147, to the Ophites.

M. de Faye is to be congratulated on a very fine book.

A. D. Nock.

¹ The statement on p. 9 that Herodotus mentions a visit of Thales to Egypt seems to be due to an inadvertence; Herodotus, as is noted *ib.*, p. 23, mentions the philosopher's Phoenician extraction but not this journey.

A History of Egypt under Roman Rule. By J. GRAPTON MILNE. Third edition, revised and enlarged. London: Methuen & Co. 1924. Pp. xxiii+332.

There had long been need of a new edition of Mr. Milne's well-known and invaluable work, which is indeed the only book of the kind in existence; for since it first appeared, in 1890, a vast amount of material had accumulated, and the second issue, in 1913, did not supply the need of an edition fully brought up to date. The new edition shows very extensive changes; indeed, the work has in large measure been recast. The old appendices and lists of documents have been cut out, but so much new matter has been incorporated that the size of the volume has increased from 262 to 332 pages. The single table of prefects at the end of the volume is replaced by lists, prefixed to each reign, of the prefects in office under the Emperor concerned, to which, after Diocletian, are added lists of the known praesides. It may be suggested that in a later edition it would be useful to give further the names of the Alexandrian patriarchs, who, in the Christian period, were often more important than the prefects.

Despite the changes mentioned, the general plan of the work remains as before: first a chronological narrative of events, arranged by reigns, and then a series of chapters dealing comprehensively with administration, finance, military organization, religion, and social life. There are also some appendices devoted to various points of detail. This arrangement is perhaps the most convenient method of treating such materials as must form the basis of any history of Roman Egypt, but it does not make for readability or literary charm. The volume indeed is one of severely "scientific" history, and makes no pretence of being a work of art. Perhaps the time has not yet come for a "literary" history of Egypt; and certainly, within the limits set himself, Mr. Milne has done his work admirably. The book is a masterpiece of compression, extracting from a great mass of miscellaneous material all the essential facts, and without a superfluous sentence. The author has kept wonderfully abreast of recent research, and seems to have overlooked nothing of importance.

With a view to a fourth edition (for new material is constantly coming to light and new monographs on particular problems are published every year), a few points may be noted in regard to which there seems room for correction or reconsideration.

Despite the recently published letter of Claudius, which he discusses in an appendix devoted to the subject, Mr. Milne adheres to the view that Alexandria possessed a senate to the end of the Ptolemaic period, and that this body was abolished by Augustus. That his arguments have weight must be admitted, and they have been reinforced by other scholars who have dealt with the point; but I confess myself still unconvinced. It seems all but incredible that if Augustus had abolished a senate Claudius, who more than once alludes to the precedent of Augustus and expressly mentions his confirmation of Alexandrian privileges, should make no reference whatever to his abolition of the senate and should even speak of the request for its introduction as a new proposal "now for the first time mooted." This consideration seems to me quite to cancel all the arguments on the other side, and the attempts of those who take the contrary view to explain it away are unsatisfactory.

The "Jewish disturbances" in 136-137 A.D., mentioned in the last paragraph of p. 47, rest on a misreading of a Berlin papyrus, and Wilcken has now shown (*Hermes*, LIV, 111) that the reference there is really to the Jewish revolt under Trajan.

In connexion with the foundation of Antinoöpolis (p. 45) it may be mentioned that there is evidence (chiefly contained in unpublished papyri of the British Museum) that many citizens of the new city were drawn from the Fayyüm, but that these very often preferred, while registering their children in the city registers and enjoying the privileges of citizenship, to reside in their own noxae. Two such families at least can be traced as residing in Fayyüm villages till the third century. It is also of interest, as illustrating Hadrian's enthusiasm for Athens, to note that the Antinoöpolite calendar employed the Attic names of the months, equating them however with the Egyptian months.

The last sentence of p. 119, "in the rural districts corn remained almost the only currency of Egypt" (in the sixth and seventh centuries), is open to question. What numismatic evidence Mr. Milne may have for it I cannot say, but references to actual coins are numerous enough in the papyri, and under the Arabs, who followed Byzantine administrative custom almost slavishly, we find in the Aphrodito papyri of the early eighth century not only elaborate accounts of money payments but constant references to ἀναπληρωμαίς, i.e. the *adaeratio* of taxes properly payable in kind; the Governor's frequent refusal to accept *adaeratio* seems to imply an actual preference for money payments on the part of the rural population (see my article *Two Official Letters of the Arab Period* in the present number).

Mr. Milne (pp. 125, 181, 288) continues to speak of the *idiologos* as high priest; but Professor Stuart Jones has made it very probable (*Fresh Light on Roman Bureaucracy*, pp. 26 ff.) that the union of the two offices was not effected until the period of the Severi.

In the notes at the end of the volume, reference should have been made, for the *strategas*, to the recent article of HOHLWEIN (*Musée Belge*, xxviii, 125-154).

On p. 139 "*archepodes*" (twice) should of course be "*archephodos*."

The account of the *exactor's* functions given on p. 148, § 54, is incomplete, for it appears from P. Lond. 1651 that they extended beyond merely financial matters.

It is not correct to speak (p. 149) of the *comarchas* as supplanted, along with the *praepositi*, by the *pagarch* in the sixth century. The *pagarch* took the place of the *praepositus pagi* in the fifth century, but *comarchas*, though not frequently mentioned, are still referred to in sixth-century documents, e.g. P. Oxy. 133 (A.D. 550), 1835 (fifth-sixth century), 1930, P. Lond. 1673.

In the references (pp. 311 ff.) to the *libelli libellaticorum* (p. 219) should have been included one to KNIFFING's recent article (*Harvard Theological Review*, xvi, 345-390), which is not only a useful discussion of the subject but includes the texts of all the known documents of the class, including some previously unpublished examples.

The statement on p. 263, "fractions of the *nomisma* were stated either as a *nomisma* less so many carats, or in carats," is surely inaccurate. Where we get such a phrase as "one *nomisma* less three carats," this means rather that it was a *nomisma* nominally of 24 but actually worth only 21 carats. That this, the usual interpretation, is correct seems to be confirmed by some of the accounts contained in P. Lond. IV and further by the fact that side by side with statements of fractions of the *nomisma* in carats we get actual fractions ("a quarter of a *nomisma*," etc.).

On p. 266 Mr. Milne states that "the race-course at Oxyrhynchos in the seventh century... apparently belonged to the house of Apion." The reference in the papyrus cited is, however, not to the race-course, but to the postal service of this great feudal family.

H. I. BELL.

Papyrusbriefe aus der frühesten Römerzeit. Herausgegeben von BROX OLSSON. Inaugural-Dissertation. Uppsala: Almqvist & Wiksells Boktryckeri-A.-B. 1925. Pp. xii+240.

Witkowski's handy corpus of private letters of the Ptolemaic period has long been familiar to students of the ancient letter, and Ghedini has recently collected the early Christian letters found in Egypt. The present work performs a similar service for the private letters of the early Roman age. One's gratitude to the able editor would have been even greater had he included the whole Roman period down to the accession of Diocletian, but that would have added enormously to the size of the volume, and the date 100 A.D., though arbitrary enough, gives a convenient limit. Even the period selected, 30 B.C. to 100 A.D., yields no less than 80 letters, to which (so quickly does our material grow) several additions could now be made. The editorial work is excellently done. The editor translates all but the most defective letters, adds an elaborate commentary, chiefly but not exclusively linguistic in character, and prefaces his collection with a useful introduction on the ancient letter. He has not contented himself with reproducing the texts as left by the original or subsequent editors, but has done much critical work of his own. He has not often been able to check his conjectures himself but has consulted scholars on the spot, and is thus enabled in several cases to publish improved texts. When it is added that he offers explanations, not always acceptable but often convincing, of words hitherto obscure, it will be seen that his work is by no means a mere collection of existing material (though such a collection would be very useful) but a substantive contribution to knowledge.

The volume would have been handier to use had the serial numbers of the letters included been printed at the top of each page; in several cases a text with its translation and commentary occupies several pages, so that time is lost in looking for its number. In other respects the texts are conveniently printed, and there are good indexes. Naturally, on many points, more than one opinion is possible, and perhaps the author is at times more dogmatic than it is prudent to be, but that seems to be the fashion among continental scholars.

In his introduction (p. 20) the editor speaks of letters being "*zusammengerollt*." The expression is to be deprecated, as letters seem usually to have been folded rather than rolled. Since Dr. Olsson does not confine this survey of epistolary practice to the first century, it might have been well, in speaking of the

forms of address, to mention the Byzantine usage, by which the writer of a letter plunged, without preliminary greeting, into the body of his communication, leaving the names of recipient and writer to be gathered from the address on the outside. In his introduction to 1-7 he dismisses the idea that Isidora was wife as well as sister of Asclepiades; but there is a good deal to be said for this, notably the mention of a child in L 11 of no. 2. The name of the Rylands Library usually suffers at the hands of foreign scholars, who regard the word as the possessive case of "Ryland" and write it accordingly (e.g. p. 80) without the "a." In 35 the sentence beginning γνῶσθι is still not quite satisfactory. Is ὁλοσθῆναι (a new reading) intended for the perfect passive of ἄλλομαι? In that case the sentence should end at γλασσοκαμίον, a new one beginning with ἐπιδεδόκα. In 59, 14 and 60, 23 Olsson reads βάκανον and explains the construction as a double accusative. It seems at least equally likely that βάκανον is for βακάνον; the plural is certainly used in 59, 12 f., though βακάνον occurs (but the ν is marked as doubtful) in l. 15.

These and other points which might be adduced are however of minor importance. The volume is an excellent piece of work and will be very useful both as a handy collection of letters and for purposes of linguistic study.

H. I. BELL.

Wörterbuch der ägyptischen Sprache, in Auftrage der Deutschen Akademien. Von ADOLF ERMAN und HERMANN GRAPOW. Erste Lieferung. Leipzig: Hinrichs, 1925.

The year 1926 will be a memorable one in the annals of Egyptian philology, for it will see the publication of Gardiner's *Grammar* and of the major part of the great Berlin Dictionary. The first part of the latter work actually bears the date 1925, and the remaining six or seven parts are to follow at intervals of about two months. It is not the present writer's intention to enter upon any critical considerations of the work from the lexicographical point of view. These must be left for a later date, when the whole of it is before our eyes. A few words, however, may be said about its general appearance and arrangement, and the conditions under which it is being produced.

Since 1897 a number of scholars have been occupied in working over the whole of the available material, and producing a slip for every single word in every text. The result is a collection of about a million and a half slips. The problem of reducing these to order and of making them available to scholars in book form at a price which shall not be wholly unreasonable is a very difficult one. Yet it appears to have been wisely solved. Those who have experienced a slight feeling of disappointment at the brevity of treatment apparent in this first instalment would do well to remember that this publication is not the dictionary but only an abbreviated version of it, one might almost say a handbook and index to it. The dictionary itself consists of the slips in Berlin, where they can be consulted by anyone who wishes to undertake a piece of minute research into Egyptian lexicography or phraseology. It is to be doubted whether by making the publication twice or three times as full as it is any greater service would have been rendered to the science; for ordinary reading purposes it is full enough, while for research on special points the appeal must always be either to the appendix-volumes which are promised to us or to the slips. Let us be reasonable in our demands: the new Liddell and Scott is sufficient for most purposes, but he who would study every single use of a word, except it be a very rare one, must make his own collections from the literature.

We are told that the text of the dictionary is in the main thrown into form by Grapow, and then discussed in detail by himself and Erman together with Sethe. Even with these two great collaborators the task thrown on to Grapow's shoulders is almost superhuman, and the Egyptological world owes him a great debt of gratitude for undertaking it, and should wish him health and strength to complete it.

The format and general appearance of the work are admirable. Herr Erichsen's handwriting and hieroglyphic script are as clear as anyone could desire, and the work is probably the best piece of autograph printing which has yet appeared in Egyptology. It was a wise move to print the references in type on separate sheets. Placed in the main body of the text, they would have made it very unwieldy and detracted much from its neat appearance. It is, however, a little unfortunate that the references issued with the first part cover only a third of its pages. We believe, too, that there is worse to come, for we hear that it may be necessary to postpone the issue of any more of the references until the completion of the whole autographed text. If this is so we shall acquiesce, however much we regret it, for Grapow's task is so Herculean that we accept without cavil any arrangement which he thinks will render it more feasible. It seems a pity that some younger scholar cannot be allotted to him as an

understudy, and to undertake this part of the labour. We hope, too, that in arranging these pages of references some thought will be given to the manner in which they are eventually to be bound. We should have thought that it would be wise to divide the dictionary into, say, four or six volumes according to its size, and to issue the references in such a form that with each of these four or six volumes of text the appropriate references could be bound up. The only precaution necessary in this case would be that the references to each new volume must begin on a fresh leaf. To have all the references together in a separate volume would be most irritating, for it would mean that two volumes of the dictionary must always be taken down instead of one.

This however is a matter of small detail. Let us rather congratulate Herren Erman and Grapow on the courage and industry which have enabled them, under depressing conditions, to translate a promise into an actuality by giving us this first volume. And let us not forget to be grateful to Professor Breasted and Mrs. Caroline Ransom Williams, who, as the authors tell us, have seen to it that post-war difficulties should not prevent the appearance of the Dictionary, and, last but not least, to John Rockefeller Jr., who by his gifts and offers to Egyptology has shown himself perhaps the most munificent and ungrudging patron of learning in the history of the world.

T. ERIC PEET.

Die bildliche Ausdrücke des Aegyptischen: vom Denken und Dichten einer altorientalischen Sprache. Von HERMANN GRAPOW. Leipzig, 1924.

For many years past those interested in the ancient Egyptian language have been too actively engaged in discovering its grammatical and syntactical mechanism to give much attention to its literary qualities. Now, however, that we have reached a stage where reasonably accurate translation is attainable, literary criticism may begin its task. Dr. Grapow's work is probably the first direct contribution to this side of the subject. It is naturally based on the collections made for the Berlin Dictionary, and is one of the many valuable side-products of that great work. Dr. Grapow states—and the reader will agree with him—that his book will at least show that “the Egyptian world does not form so strong a contrast with ours as many people believe.” Egyptian simile and metaphor cover the whole range of life and experience, and consequently are to a great extent parallel to our own, and where there are differences they are often to be explained by local circumstances. Thus we in Europe, when we wish to personify senseless rage and insatiate greed, do not think, as the Egyptian did, of the crocodile, while on the other hand the Egyptian never washed his linen as white as snow.

Dr. Grapow's volume will reap its full harvest when similar work has been done on the other ancient languages, for we shall then have an opportunity of judging from the earliest evidence available how much of figurative expression is common to speech as a whole and how much depends on the original genius of a particular language. To take one instance; both in English and Egyptian gold lies at the root of many metaphors, while silver, though in Egyptian its name “the white” suggests numerous possibilities, supplies scarcely any. What is there in the nature and appearance of gold which makes it a more common instrument of metaphor than silver in both languages? Is it its likeness in colour and brilliance to the sun? And can any general rules be formulated as to what kinds of things or what particular things lend themselves most readily to figurative use? These are questions of a kind which this book and similar work on other languages might enable us to answer.

The work is not complete in itself, for two further volumes are to give us firstly the originals in autographed hieroglyphs of all the passages quoted, and secondly a history of the development of figurative expression in Egyptian.

I cannot refrain from noticing a curious lapse on p. 189, note to p. 17 a. Dr. Grapow quotes among sentences which may certainly be regarded as Egyptian proverbial sayings the passage from Papyrus Westcar 6. 7, *mr-i hnw-i r mti-f*, translating it “Ich will meinen Topf bis auf seinen Boden.” Surely these words are straightforward Egyptian for “I prefer my own thing to its like.” The girl has, in rowing, lost her hair amulet (*nhw*; see *Journal*, XI, 212-3) and is so perturbed that she ceases to row. The king offers to replace (*dbt*) it by a similar one. This however does not satisfy her; she insists on having her own amulet, and consequently a magician must be summoned to recover it from the river bed. I believe that this has been pointed out in print, though I cannot now lay my finger on the reference.

T. ERIC PEET.

Dolmen und Mastaba. Von ELISE BAUMGÄRTEL. *Beihfte zum Alten Orient*, Heft 6. Leipzig, 1926.

For some years past the clarion of the diffusionist school has been proclaiming in strident tones from the house-tops the theory that the dolmen is a derivative of the mastaba. It is therefore refreshing, if only by way of contrast, to find a champion of precisely the opposite hypothesis, namely that the mastaba is, in part at least, descended from the dolmen. Whether we agree with the authoress' conclusions or not, she has at least made a thoughtful and interesting contribution to the study of the tomb-form in early Egypt. Her thesis, stated in her own words, is as follows.

"The characteristic Egyptian grave of the earliest times is the sand-grave, from which developed the grave with entrance shaft or staircase. In middle or late predynastic times Egypt became acquainted with the dolmen-grave covered with a mound of stone, as built in North Africa, and in particular with the *bassina*-type with cult-niche. This influence presumably first affected Upper Egypt. The mastaba is a development of the dolmen-grave influenced by the use of native forms."

Those who wish to know how this thesis is developed must read the 35 short but clear pages in which it is expounded, accompanied by numerous illustrations. It is always difficult to appraise the value of arguments in archaeology, where we deal rarely with ineluctable demonstration and more often with the balance of probabilities. At the same time a few criticisms suggest themselves.

The authoress begins by dividing Egyptian mastabas into two types, an earlier type with the burial-chamber above ground, as in the Menes tomb at Naḳādah, and a later type in which the chamber is underground. What she omits to tell us, however, is that of the earlier type there is but one example, the Naḳādah tomb which she quotes. The fact is that the essence of an Egyptian tomb is an underground burial-chamber and an above-ground offering-chapel. The Naḳādah tomb is the one single exception to this; it remains an anomaly in the history of the Egyptian tomb, and cannot be quoted as a type. With this one exception Egypt has no examples of tombs in which the chamber is above ground. The tomb quoted by the authoress from Hierakonpolis can hardly be used as evidence, for the description given of it is so inadequate that nothing can be inferred as to its shape, size or date. I see no reason at all in the meagre details given by its finders for supposing it to have been above ground.

In this absence from Egypt of tomb-chambers built above ground lies the real weakness of the theory. The dolmen, at least in its original form, is a tomb built above the ground, of large blocks of stone, and often covered with a mound of earth or stones, and the stone-lined pits of the type illustrated on Pl. ix from Bu-Nuarra are not true dolmens at all, but seem to be a late product of megalithic architecture in North Africa. The Egyptian tomb is a pit cut in the earth, and the fact that in some cases this pit is given a stone lining and covered with rough stones, or with thin flat stones or with three or four large dressed stones (for these are the three types found at Nag' ed-Dér), does not make it cease to be a pit. It is merely a variant of the common type, in which a brick lining has been replaced by stone and a wooden roof by one of slabs. Its typological development is native and natural.

The truth is that the whole history of the tomb, both of its burial-chamber and of its offering-chapel, over the predynastic period and early dynasties, is so smooth and straightforward that no elaborate theory of a cross current from abroad seems necessary. The earliest sand-graves may well have been marked by a small mound of sand, and, in the placing on this of a few loose stones, found in the neighbourhood, in order to make it more conspicuous, we have the germ of the mound, be it of stones or of bricks. As the mound increases in height it needs a retaining wall of stone or brick, and so arises the solid mastaba, the latter of whose walls may even be a survival of the inward slope of the primitive retaining wall. As for the niche, it is the obvious reply to the need for some definite spot in which the food and drink for the dead man may be placed: how necessary such definition was felt to be is clear from the subsequent history of the tomb-form in Egypt. Is this so unreasonable as an explanation of the origin of the solid mastaba with external niches that we need evoke the aid of the North African *bassina*, and may it not be significant that the mastaba is invariably rectangular like the later predynastic tombs and never circular like the *bassina*? With regard to the tomb-chamber surely a similar local development may be indicated. The late predynastic grave is lined with mud, or even with mud bricks, and roofed with wood. May we not suppose that, in places where flat stone abounded, the substitution of slabs of stone for brick and wood was a natural development, without calling in the dolmen of North Africa to explain it? Surely it would be far from surprising if this happened in the predynastic period, but that it should happen at Nag' ed-Dér at a period when, as the recent finds of Saqqārah teach us, architecture must have been in a highly advanced condition in Egypt, is perfectly natural.

The authoress' theory also has its chronological difficulties. If we except the so-called predynastic dolmen at Hieraconpolis (see below), the evidence given for the use of dolmen-tombs in Egypt is all taken from the late Second and the Third Dynasty graves at Nag' ed-Dér. Is not an anachronism involved in using this as a step in a development the final stage of which is seen in the Menes mastaba at Nakâdah, which belongs to the early First Dynasty? Cogent reasoning would require that the transition stages should be exemplified from the late predynastic period.

The authoress is forced to assume that the use of megalithic tombs in North Africa goes back as early as the predynastic period in Egypt. In the admirable sketch which she gives us of what is known concerning these tombs in North Africa she is very honest about their date. The fact is that all those which have been systematically dug point to a date in the bronze or iron age, to which the occurrence in them of flint or other stone objects is no obstacle. There is no reason why some of the dolmens should not prove to be earlier, but the fact is that so far none of them have. A parallel difficulty occurs in the matter of distribution. Megalithic buildings have not as yet been reported from the eastern half of Tripoli, though this again may be a mere matter of accident. Nevertheless evidence is evidence and the existence of this gap between the megalithic area of North Africa and the Nile Valley with which connection is supposed is unfortunate.

The arguments for the early date of the North African tombs based on pottery types are not very convincing. Of the two forms of dolmen pottery adduced as evidence it is true that one, the spouted bowl, occurs early in Egypt; its date in North Africa is, however, a matter of complete conjecture; most of the examples given are shown by their provenance to be very late, and the ingenious argument from Crete (p. 21) designed to show that the type existed in much earlier times is hardly convincing. The other type, the handled jug, is an unfortunate choice, for such a form is exceedingly rare in early Egypt, as indeed are all pottery forms with handles. The authoress can give only two examples, one in stone from Abusir el-Melek, and the other a reconstruction of a fragment of rather doubtful date from Nakâdah.

We are given no hint as to why the Egyptians should adopt a new form of grave from their western neighbours. The authoress speaks in that loose way in which we are all too apt to speak of "ein Einfluss vom Westen" (p. 27) though she does not exclude the possibility that megalithic tombs may have been an original heritage of the North African peoples including the Egyptians. But what is the nature of this "influence"? Was it merely that of trade, or was there an immigration of North Africans into Egypt? If the latter, has it left any archaeological traces? And if the former is suggested, can we really believe that trade with the comparatively barbarous west led a conservative people like the Egyptians to modify the form of their tomb? Why should it?

Elise Baumgärtel's little paper is enjoyable and stimulating reading, but it has left me with a singularly disconcerted feeling, for, with precisely the same facts before their eyes, she and Professor Elliot Smith have reached precisely opposite conclusions. Truly archaeology is no exact science.

T. ERIC PEET.

The Date of the Exodus in the light of external evidence. By J. W. JACK, M.A. Edinburgh, 1925.

It is with considerable apprehension that one approaches a book purporting to deal with external evidence bearing on Old Testament History, for so often such a work is purely of the nature of apologetic. With the present volume, however, these fears are vain, for the author is prepared to face facts squarely, rightly confident that by this course far less harm can be done to the credit of ancient Hebrew literature than by concealing or perverting unpalatable truths. Add to this the facts that he has devoted many years to his task, that he has read and assimilated practically the whole literature of the subject, that he has a critical mind and a sound judgment, and it is not surprising that he has produced an exceedingly good book.

He believes that the Exodus took place about 1445 B.C., in the reign of Amenophis II, and that Tuthmosis III was the Pharaoh of the Oppression. He sets out to prove this by showing the serious difficulties besetting the attempt to place the event at any date widely separated from this, and he certainly makes out a very good case for his belief. He has an interesting chapter (iv) on the period of the Judges, where he tries to meet the objection that, had the Israelites been settled in Egypt as early as he thinks, there must have been some reference in the Judges to the Egyptian conquest of Syria-Palestine in the Eighteenth and Nineteenth Dynasties. His explanation that the Hebrews were in the main confined to the hill districts and that the Egyptian campaigns mainly affected the coastal plain with

its important road is one which future excavation in Palestine may put to the test. He would have done well to leave the matter here, for in his anxiety to prove that one incident in Judges may conceal a collusion with Egypt he makes his sole original incursion into philology, with disastrous results. He suggests that Sisera may be the Egyptian Sesi-Ra, "Servant (or Follower) of Rēf." Unfortunately the word for "to follow" in Egyptian is not *se* but *sa*, and, what is more, the word Rēf has for final consonant an 'āin (Hebrew י) which could under no consideration have dropped in a Hebrew version of the name, whatever its date. To derive the Hebrew סִסְרָא from an Egyptian name "Follower of Rēf" is impossible.

Chapters v and vi, dealing with Akhenaten and Atenism, are not quite on the same level as the rest of the book. This is due partly perhaps to the fact that they are in the nature of a skionachy, for the view connecting the Exodus with the religious revolution under Akhenaten surely has not really "gained many adherents within recent years" (p. 86), and partly because the recent discoveries in Egypt have produced a crop of rather hastily written books, some of which, while they may be thought good enough for the public, are neither accurate enough nor restrained enough for real scholarly needs. Thus these chapters fail to draw that exact distinction between fact and theory which is so essential to argument, and which the author has so well observed elsewhere. A few instances may be given. There is no proof of a "serious movement throughout the land" in the "latter part of the reign of Amenhotep III" "to break away from the worship of.....Amun.....and to bring in the worship of Aten" (pp. 87-88). All we know is that during this reign Aten came into greater prominence in Thebes, but of a break, or contemplated break with Amūn, there is as yet no particle of evidence. That "Amenhotep III was influenced.....towards Atenism by his mother Mutemunya.....daughter of Artatama king of Mitanni" (p. 89) is a pure guess, and does not warrant such conclusions as that "Akhenaten's religion, it is clear, was a form of very old Egyptian sun-worship.....modified by philosophical doctrines of Mitannian and Indian origin" (p. 104), or that "when reduced to sober truth Atenism becomes nothing more than a form of sun-worship, Indian in origin" (p. 110). How do the "inscriptions on large steatite scarabs suggest that" Queen Ti was "in favour of Atenism" (p. 89)? What is the evidence that Nefertiti was Akhenaten's own sister (p. 90, n. 1)? Surely her origin is quite unknown. There never was any good reason for believing that Tutankhamūn was identical with one of Akhenaten's nobles, Tutu by name (p. 96), and now that he appears on medical evidence to have been about 12 at his accession it becomes impossible. On p. 104 we read that "Atenism was a recognized Egyptian religion, though its cult had been non-existent for centuries." This implies that the cult of Aten had once been existent in Egypt. There is no evidence for this. On the same page, "he went further than previous worshippers in regarding the disk not only as the abode of the sun god ('Shu in the Disk'), but as the god himself in bodily form." The correct translation of the Egyptian words quoted is probably "Shu who is the disk," and it is clear from this and from other considerations that for Akhenaten the god was the disk itself in the literal and physical sense, and not some power or deity who abode in it. With regard to the discussion of these same words on p. 107, Gunn is almost certainly right in taking Shu to be neither the word for heat or light nor yet the old god of the air, but an earlier form of the sun-god, who is thus by these words identified with Akhenaten's Aten. The fact that the Egyptians occasionally speak of an indefinite "god" or "the god" hardly proves that they had "a dim and vague idea" of the supreme being "whom they regarded as distinct from local and national gods" (p. 107). The phrase is used in didactic and aphoristic literature merely in order to give this a wide application: the Theban would interpret it as meaning Amūn, the Memphite as Ptah and so on. On the point of monotheism (pp. 107-9), though the evidence that Akhenaten insisted on a rigorous monotheism can be overstated, and though there is nothing to show that he had evolved any new and lofty ideal of a supreme god, yet the deliberate suppression by Atenism of all its rivals puts it in a different class from any other religion which ever prevailed in Egypt, and it is foolish to blind oneself to this or to attempt to glose it over.

Points such as those enumerated above, to which additions of a similar nature could easily be made, suggest that in this section of his work Mr. Jack has reached the heart of the matter less completely than elsewhere, and it may be added that no discussion of the Aten religion can be adequate which does not take into account the progressive nature of the king's theology, as instanced, for example, by the change in the names of the Aten. (See Gunn in *Journal*, ix, 168 ff.)

But to say that the author has fallen short of perfection in a portion of his task where it is difficult even for him who reads Egyptian and can control the original sources to separate fact from fancy is no condemnation. For the book as a whole I have nothing but praise. It has a scholarly appearance and this is not, as often, a mere veneer, for it is scholarly. The footnotes are particularly good, and the

references are always to the point and are never allowed to swamp the text. There are excellent maps and appendices, and the index stood admirably the tests I applied to it.

Here are a few minor points.

p. 4. In view of a recent correspondence in the weekly and daily press it is well that there should be no misunderstanding about Gardiner's part in the decipherment of the Sinai inscriptions. They were found in 1905 and put away unread on a shelf. From here they were taken down with others in 1915, and within a few weeks of receiving them Gardiner had produced the article quoted by Mr. Jack, in which, in the opinion of most European scholars, he rightly divined the nature of the script, and deciphered probably as much as can be deciphered, owing to the mutilated state of the inscriptions. Other scholars, including the two quoted, have made some minor additions to Gardiner's results. With regard to the supposed occurrence of the name of Moses in these inscriptions, this idea was hatched in Germany nearly three years ago, and died a very early death there. Some enterprising journalist dug up the corpse and flung it before the British public in a newspaper article last winter. Let us hope that it is now decently and finally re-interred.

p. 59. "the Retenu (Syrians), Aamu (Canaanites)." This distinction is a figment of Mr. Jack's own brain, for no one has yet from the Egyptian texts succeeded in disentangling the four words Retenu, Aamu, Setin and Menthu, probably because the Egyptians themselves were confused about them. One thing however, is clear, namely that Retenu is the name of a country not of a people.

p. 62. "Rameses II.....the Sesostris of the Greeks." Sethe may, I think, be said to have proved that the Sesostris of the Greeks was a personality conflated out of Rameses II and one of the Senwosrets of the Twelfth Dynasty. Sesostris is certainly, as he has pointed out, a Graecized form of Senwosret.

p. 66. The identification of the Pelasgi with the "Peoples of the Sea" needs a strong point of interrogation.

The spelling of proper names is very sensibly and accurately done. A few slips have passed. On p. 66 n. 1, read "*The Papyrus Anaktasi I*," and on p. 111 n. 2, read "Liturgy" for "Literature." Mr. Woolley, I know, likes two Es in his name. Tell el-Maskhūṭah should be spelt with kh, not simply k; so, too, perhaps, should sheikh, the more so since the form with no h and pronounced to rhyme with peak has, after an honourable career, now become part of the stock in trade of the cinematographer, the *feuilletonist*, and the sentimental ballad writer, to whom it may be abandoned without a tear.

T. ERIC PEET.

The Healing Gods of Ancient Civilisations. By WALTER ADDISON JAYNE. Humphrey Milford, for the Yale University Press, 1925. 8vo. pp. xix + 569. 7 Pls.

This painstaking compilation of information surveys the civilisations of Egypt, Babylonia and Assyria, the Pagan Semites, Ancient India, Ancient Iran, Greece and Rome. Each section consists of two parts, a general survey of the religious development of the civilisation in question and a list of healing deities.

A formidable erudition as regards secondary sources has gone to its making, but there are indications that the author has never himself worked at the original sources in any one of the fields. In consequence, though he usually, though not always, follows good guides, he sometimes misunderstands what they say, and occasionally there are inconsistencies where in different passages he has followed authors whose views diverge.

Thus the curious statement that Athens's origin "is referred to the archaic period in Athens" or the inconsistent views of the origin of Eileithyia (pp. 204, 329). The now much debated possibility that Eileithyia may be a pre-Hellenic word is not mentioned.

Inevitably our author's dependence on secondary authorities will lead to mistakes, e.g. the twice repeated statement that Mithraism spread over Greece, whereas one of the most curious features of its distribution is that it did not. The statement about "the philosophic platitudes of Neo-Platonism" (p. 392) betrays ignorance of the first century after Christ which appears to be the period of the context, nor is it true that the rivalry of pagan religions under the Roman Empire was conducted with bitter antagonism (p. 397). The number of the keepers of the Sibylline Books was not raised to fifteen "in the last year of the Republic" nor had anyone except the secular magistrate the right of "*spectio*." And so on.

Clearly too our author's judgment is likely to be biased by insufficient knowledge, e.g. in the remarkable statement that "Greek deities prompted no spiritual aspirations and were not looked upon as beings of moral excellence or wisdom." Are the "sons of Re" really "an early example, if not the origin, of the

idea of virgin birth"? The account of the Greek Imouthes (p. 64) is very inadequate and so is the handling of the difficult question of the sources of Ptolemy's creation Serapis (p. 77).

It is a golden rule to check references taken from secondary sources. Had it been observed, the misrepresentation on p. 207 of what Plato really said in *Phaedrus* 229 n might have been avoided. Again, in his *Culte* Farnell made a slip writing "Proetids" for "Danaids." This passage has been twice used in this book without the error being detected.

The system of spelling classical names is not impeccable. *Phaedrus* is defensible or *Phaidros* but not *Phaidrus*. *Ailianos* for *Aelian* and *Arrianos* for *Arrian* are correct if pedantic, but why *Kornoutos*, just because *Cornutus* happened to write in Greek? *Hypoboreans*, *Mykena* and, though it occurs more than once, *Wiliamowitz* one may hope are contributions of the printer. The horrible word "cultic" may be American though it is not English.

An imposing bibliography of twenty pages is appended. It contains much valuable and curious information but it is quite indiscriminate. It contains a good deal of rubbish which might be omitted, unless the list is to be exhaustively complete. On the other hand there are omissions of works which have a right to inclusion. Campbell Thompson's *Assyrian Herbal* perhaps did not reach Colorado in time but at least the earlier of the two *Assyrian Medical Texts* should have done so. The name of Unguad does not appear at all in the Babylonian section.

I should have expected Moulton's *Early Religious Poetry of Persia* to figure under Iranian, and Carl Clemen is not mentioned at all. On these sections I have myself only the superficial knowledge of a general reader, but when I turn to the classical sections where I am at home, I find my suspicions sadly confirmed. A number of obscure papers are cited on points of detail which are of varying merit and relevance. To make them complete they would need addition. But what is one to think of a bibliography which includes Elderkin's *Kantharos* from which no sound information about healing cults—or indeed anything else—is to be obtained, and omits Farnell's *Hero cults*, the reading of which might indeed have led to the emendation of the passages on Asklepios, Amphiaraos and the Dioskouroi, or, to take well-known specialist treatises of importance, Kutsch, *Attische Heilgötter und Heilheroen* and Tamborino, *De antiquorum daemonismo*!

W. R. HALLIDAY.

Die hellenistische Gestirnsreligion. Von HUGO GRESSMANN. *Beihfte zum Alten Orient*, Heft 5. Leipzig, 1925. pp. 31, 4 plates.

This general account of a complicated subject is very welcome. The writer's touch is enviably sure. His topic is, in the main, an account of the chief contribution of Babylonia to the composite civilisation of the Graeco-Roman world, which is generally called Hellenistic. Professor Gressmann begins by stressing the discovery of Kugler and Schnabel that in Babylonia itself the scientific spirit began to emancipate itself from theology, and astronomy to take a place alongside of astrology. Whether this is due to reflex influence from the Ionians remains obscure, though I think that it probably was. I am in hearty agreement with Professor Gressmann when he stresses the importance of realising what may be called the internationality of learning and letters before Alexander. The civilisations of Greece and of the Ancient East did not develop independently in water-tight compartments. In fact, though, for causes which are here admirably summarised, Alexander's career marks an epoch, tendencies which became dominant under the Successors are observable in Greek civilisation before Alexander was born. This obscure and difficult field of religious and cultural history deserves more skilled attention than it has yet received.

Very interesting are the examples here adduced of Mesopotamian astrological elements in Jewish culture, which in some cases quite certainly go back to the Persian period. Admirable too are the short analysis of the respects in which Posidonius is truly an oriental and the brief summary of the reasons why astrology obtained its hold upon the late classical world and maintained it throughout the Middle Ages. In fact, though the survey is brief and the subject is large, the outline is firm and masterly and the essay abounds in good and suggestive things.

W. R. HALLIDAY.

Die Bewaffnung des altägyptischen Heeres. Von WALTHER WOLF. 71 text illustrations and 22 plates. Leipzig: Hinrichs, 1926.

The title of this book strikes oddly on English ears when literally translated: "The Armament of the Ancient Egyptian Army." Can one speak of "the ancient Egyptian army," one asks? The reason is that

the word "army" in English has a predominantly modern connotation, and restricted meaning, whereas the German "Heer" has not. One may perhaps speak of the Roman or Spartan "army," though even here "armies" would be better. "Armament," too, is too modern. Were the book translated, the title would have to be recast as "The Weapons of Ancient Egypt" or something of that sort, leaving out altogether the word "Heer," which can be applied to the tribal levies of predynastic Egypt, for instance, whereas our word "army" cannot. Dr. Wolf perhaps uses the word "Heer" also because he considers the weapons of the mercenaries of the Nineteenth Dynasty as well as those of native Egyptian warriors.

The book is most useful: an admirable *résumé* of our modern knowledge on the subject, with well-chosen illustrations. The characteristic weapons of the three chief periods of Egyptian history are described in succession. Dr. Wolf draws largely on Berlin naturally for his illustrations, but the British Museum is also well represented in his collection, through the medium of Sir Flinders Petrie's *Tools and Weapons*. It looks however as though Dr. Wolf depended entirely on that useful publication for his knowledge of the British Museum weapons, and had not known them *de visu* when he wrote, or he would not, I think, in dealing with the weapons of the foreign mercenaries when he illustrates the Shardana with their long heavy swords have omitted to mention or illustrate the remarkable Shardana or Philistine broadsword that was published by Burchardt and myself in *Proc. Soc. Ant.*, xxvii (1915), 127, and again by me in *Aegean Archaeology*, Fig. 109. This sword was found, it is true, just outside Egypt, at Gaza, but Dr. Wolf illustrates an early *khepesh* or "Sichelschwert" found at Byblos, so that the Gaza broadsword need not have been omitted. Apropos of the "sickle-sword," a fine and early example, somewhat resembling that from Byblos, was found by Garstang at Abydos, and is now in the collection of Mrs. J. H. Ren. This does not seem to be known to Dr. Wolf.

The development of Egyptian weapons is very interesting. It is marked by a characteristic conservatism that often left the warriors of the nation in the background at critical moments. Up to the time of the Middle Kingdom the development of weapons in the Aegean and in Egypt was much the same, the types being closely related. But during the Middle Kingdom the technique of the Egyptian weaponsmiths remained stationary, while that of the Cretans forged ahead, and by the Third Middle Minoan period the warriors of Keftiu were armed with the long rapier-like swords (with which neither Egypt nor Asia had anything to compare), developed out of the long daggers common to both Egypt and Crete; while the hafted axehead of Asia had been adopted in Crete, whereas in Egypt it never found foot. The Asiatic armament was equally superior to the Egyptian, and it cannot be doubted that the victory of the Hyksos was largely due to their better arms. After the war of liberation we find that one specifically Asiatic weapon, the *khepesh*, was completely adopted in Egypt, and not only became the favourite weapon of the kings but was even attributed to war-gods. The war-pickaxe also (not illustrated by Dr. Wolf) was also adopted. The great broadsword of the Shardana seems however never to have been carried by Egyptians, nor was the Minoan rapier adopted. But under the Nineteenth Dynasty we find the straight and the slightly leaf-shaped swords of the earlier Achæan types used, and one of the former has the cartouche of King Seti II. The later Achæan bronze leaf-shaped sword of the common European type hardly appears, as connexion between Greece and Egypt was ceasing by the twelfth century. It is very curious that the hafted axe was never adopted generally: Egyptian conservatism clung tenaciously to the wretched little hatchets stuck through sticks and secured by leather bands, which were the Egyptian "Lieblingswaffe," apparently.

Dr. Wolf devotes much space to the bow, on which he has interesting conclusions to offer, and well describes the chariot. His illustrations of the scale armour and plumed helmets of the late New Kingdom are also acceptable. The plumed helmet seems to have been of West-Anatolian origin (Carian), and to have passed on one side to Crete and on the other to the Semites and so to Egypt. The Egyptian (and probably the Canaanite and Syrian) helmets appear to have been of leather; but the Minoans, while they also wore leather helmets garnished with boar's teeth, at the same time wore metal helmets, of which they were possibly the inventors, unless the idea came from Anatolia, whence it passed eastwards to Assyria. Their helmets sometimes resemble the mediaeval Italian sallet or even bear some likeness to the modern German "Stahlhelm." And they were the ancestors of the bronze helmets of later Greece. Such heavy things would however be unbearable in Egypt, where generally, after the time of the Middle Kingdom, the note in armour and weapons is one of lightness, suitable to the climate, but not conducive to great efficiency. Dr. Wolf gives the Egyptian words for each type of weapon, etc., and generally has prepared a very useful little book.

H. R. HALL.

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